

20020104.qrp v02_n426.qrl.20020104

Date: Fri, 4 Jan 2002 19:03:11 EST
From: qrp-1@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: QRP-L digest 2426

QRP-L Digest 2426

Topics covered in this issue include:

- 1) [116875] George (N2JNZ / QRPp) The Winner
by John R Kirby <n3aaz-qrp@juno.com>
- 2) [116876] Subject: SWR, Theroy vs. Real World Conditions
by John R Kirby <n3aaz-qrp@juno.com>
- 3) [116877] Re: workbenches
by "Bruce Shaw" <kg4dzu@ivwnet.com>
- 4) [116878] RE: Subject: SWR, Theroy vs. Real World Conditions
by "Tracy Markham" <tracy@bytemark.com>
- 5) [116879] Re: First Kit Suggestions?
by NB6M@aol.com
- 6) [116880] Re: [fpqrp] TRUFFLE warning
by "Mike Malone" <mmalone@worldlogon.com>
- 7) [116881] RE: SWR, Theroy vs. Real World Conditions
by Nick Kennedy <nkennedy@tcainternet.com>
- 8) [116882] Re: workbenches
by "Mike Branca" <w3irz@att.net>
- 9) [116883] Re: SKN and the hunt for WAS
by "Tom" <thom2@worldnet.att.net>
- 10) [116884] RE: Workbench Top Recommendations?
by "Roger A. McCarty" <rmccarty@earthlink.net>
- 11) [116885] Re: Fading Visual Acuity
by "Leon Heller" <leon_heller@hotmail.com>
- 12) [116886] RE: Workbench Top Recommendations?
by Nick Kennedy <nkennedy@tcainternet.com>
- 13) [116887] FOX: One down fast!
by "Karl F. Larsen" <k5di@zianet.com>
- 14) [116888] Re: Workbench Question?
by "Leon Heller" <leon_heller@hotmail.com>
- 15) [116889] Re: Subject: SWR, Theroy vs. Real World Conditions
by "Karl F. Larsen" <k5di@zianet.com>
- 16) [116890] 70.7 volt line-to-voice-coil transformer. What is it?
by lenny wintfeld <w2bvh@home.com>
- 17) [116891] WHERE'S THE OTHER FOX
by Arthur Moe <kb7ww@uswest.net>
- 18) [116892] Re: WHERE'S THE OTHER FOX
by "Mike WA8BXN" <hubby2k@hotmail.com>
- 19) [116893] FOX: Anyone hear VE3FAL?

- by "Karl F. Larsen" <k5di@zianet.com>
- 20) [116894] Where that rascally VE3FAL?
by "Carter Craigie N3AO" <n3ao@bee.net>
- 21) [116895] FOX: VE3FAL
by "Tom" <n1tp@worldnet.att.net>
- 22) [116896] A Good Week
by "George , W5YR" <w5yr@att.net>
- 23) [116897] Re: Where that rascally VE3FAL?
by "T.E. 'Doc' Drake - W5TB" <w5tb@arrl.net>
- 24) [116898] VE3FAL run to ground!
by "Carter Craigie N3AO" <n3ao@bee.net>
- 25) [116899] Re: One down fast!
by "Trevor Jacobs" <fxtech@earthlink.net>
- 26) [116900] RE: 70.7 volt line-to-voice-coil transformer. What is it?
by Nick Kennedy <nkennedy@tcainternet.com>
- 27) [116901] Re: VE3FAL run to ground!
by "T.E. 'Doc' Drake - W5TB" <w5tb@arrl.net>
- 28) [116902] Re: Workbench Top Recommendations?
by Ron KU7Y <mswmod@bigplanet.com>
- 29) [116903] January surplus parts
by "Brian Murrey" <brian@iquiest.net>
- 30) [116904] Visual Acuity> bifocals
by "ss lyon" <sslyon@megalink.net>
- 31) [116905] vision... new developments
by "ss lyon" <sslyon@megalink.net>
- 32) [116906] Re: workbenches
by David Hinerman <wd8civ@worldnet.att.net>
- 33) [116907] Fox Catcher
by "Stephen M. King" <frastephen@home.com>
- 34) [116908] Re: SWR, Theroy vs. Real World Conditions
by "George, W5YR" <w5yr@att.net>
- 35) [116909] Re: Visual Acuity> bifocals
by "David Porter" <aa3ur@home.com>
- 36) [116910] Re: FOX: One down fast!
by Todd Enders <enders@bolshoi.cc.misu.nodak.edu>
- 37) [116911] Re: Visual Acuity> bifocals
by "George, W5YR" <w5yr@att.net>
- 38) [116912] Re: SWR, Theroy vs. Real World Conditions
by "John Moriarity" <k6qq@hdo.net>
- 39) [116913] Re: SWR, Theroy vs. Real World Conditions
by "George, W5YR" <w5yr@att.net>
- 40) [116914] Re: Workbench Top Recommendations?
by "blinn" <blinn@smgazette.com>
- 41) [116915] Re: [Re: Small Solar Panel?]
by "P.Ermisch" <ermisch@usa.net>
- 42) [116916] FOX: Corrected Results
by "Marshall Emm" <mgemm@mtechnologies.com>
- 43) [116917] SKN 2002 report.

by "Mark Prather" <wb9hfk@yahoo.com>
44) [116918] Re: Workbench Top Recommendations?
by "blinn" <blinn@smgazette.com>
45) [116919] OT Linux invasion woes
by <n2go@arrl.net>
46) [116920] ARRL Radio Designer
by "Huston" <hgruen@pacifier.com>
47) [116921] Fw: One down fast!
by "k8cv" <k8cv@netzero.net>
48) [116922] Re: workbenches
by Bruce Muscolino <w6toy@erols.com>
49) [116923] Re: Need source (cheap)
by Bruce Muscolino <w6toy@erols.com>
50) [116924] Re: ARRL Radio Designer
by "Leon Heller" <leon_heller@hotmail.com>
51) [116925] Re: 70.7 volt line-to-voice-coil transformer. What is it?
by Dave Marling <dbm@klis.com>
52) [116926] OT: January Spartan Sprint
by ARDUJENSKI@aol.com
53) [116927] Collecting parts & other PA stories
by Nils R Young <nilsbull@juno.com>
54) [116928] Re: ARRL Radio Designer
by "Rod N0RC" <rod@n0rc.com>
55) [116929] VE3FAL alludes me
by "Karl F. Larsen" <k5di@zianet.com>
56) [116930] Re: OT Linux invasion woes
by "Karl F. Larsen" <k5di@zianet.com>
57) [116931] [CONTEST] QRP Contest Calendar - Jan 2002
by Ken Newman <N2CQ@dandy.net>
58) [116932] Re: Visual Acuity> bifocals
by W2AGN <w2agn@pobox.com>
59) [116933] RE: First Kit Suggestions?
by Boliver Allmon <Boliver.Allmon@HALLIBURTON.com>
60) [116934] Re: ARRL Radio Designer
by "Lau, Zack, W1VT" <zlau@arrl.org>
61) [116935] RE: First Kit Suggestions?
by Boliver Allmon <Boliver.Allmon@HALLIBURTON.com>
62) [116936] Feedline freedom
by "Steve Galchutt" <n0tu@hotmail.com>
63) [116937] Re: Visual Acuity> bifocals
by "Scott E. Olitsky" <solitsky@acsu.buffalo.edu>
64) [116938] Re: OT Linux invasion woes
by Caitlyn Martin <ku4qd@qsl.net>
65) [116939] Re: Collecting parts & other PA stories
by "Ingo, DK3RED" <dk3red@t-online.de>
66) [116940] RE: Workbench Top Recommendations?
by "Kwik, Ed " <ed.kwik@delphiauto.com>
67) [116941] Re: First Kit Suggestions?

by "Mike Yetsko" <myetsko@insydesw.com>
68) [116942] OT: FWIW....Bifocals & reading glasses
by "Rex Harper" <w1rex@megalink.net>
69) [116943] RE: First Kit Suggestions?
by Boliver Allmon <Boliver.Allmon@HALLIBURTON.com>
70) [116944] RE: Workbench Top Recommendations?
by "Brad Hernlem" <alihernlem@hotmail.com>
71) [116945] Collins Mechanical Filters
by "Brad Hernlem" <alihernlem@hotmail.com>
72) [116946] Fw: Computing square roots, help needed
by "Patrick Cummins" <pcummins@misnet.com>
73) [116947] Re: Small Solar Panel?
by Dave Redfearn <n4elm@attbi.com>
74) [116948] Re: Workbench Top Recommendations?
by "Ham" <KD5NWA@mbayona.com>
75) [116949] Re: Collins Mechanical Filters
by "Ingo, DK3RED" <dk3red@t-online.de>
76) [116950] Re: chips and dips
by "John_Evans" <jaevalns@codenet.net>
77) [116951] Re: VE3FAL eludes me
by "George, W5YR" <w5yr@att.net>
78) [116952] WARC band exile over
by "Rod N0RC" <rod@n0rc.com>
79) [116953] Re: Fw: Computing square roots, help needed
by David Hinerman <WD8CIV@worldnet.att.net>
80) [116954] Re: First Kit Suggestions?
by Stephan Greene <sgreene@patriot.net>
81) [116955] Re: Collins Mechanical Filters
by "Brad Hernlem" <alihernlem@hotmail.com>
82) [116956] Re: WARC band exile over
by Ed Lawson <k1vp@grizzly.com>
83) [116957] Re: SWR, Theroy vs. Real World Conditions
by "Glen Leinweber" <leinwebe@mcmal.cis.mcmaster.ca>
84) [116958] Don't Miss the Spartan Sprint on Monday!
by Russ Carpenter <russ@natworld.com>
85) [116959] Give 80 Meters a Try in Monday's Spartan Sprint
by Russ Carpenter <russ@natworld.com>
86) [116960] Re: Workbench
by George Gingell <k3tks@u1.abs.net>
87) [116961] Re: WARC band exile over
by Bob Nielsen <nielsen@oz.net>
88) [116962] Re: Visual Acuity> bifocals
by Bruce Muscolino <w6toy@erols.com>
89) [116963] Re: SWR, Theroy vs. Real World Conditions
by "George, W5YR" <w5yr@att.net>
90) [116964] Re: VE3FAL alludes me
by "Trevor Jacobs" <fxtech@earthlink.net>
91) [116965] Fox: VE3FAL eludes me

- by Pete Burbank <plburbank@kih.net>
- 92) [116966] Re: Fw: Computing square roots, help needed
by "Leon Heller" <leon_heller@hotmail.com>
- 93) [116967] Re: Fw: Computing square roots, help needed
by Stewart Bryant <stewart.bryant@virgin.net>
- 94) [116968] 6 METER DX
by Arthur Moe <kb7ww@uswest.net>
- 95) [116969] UPDATE: SMT Practice Kit
by Steven Weber <kd1jv@moose.ncia.net>
- 96) [116970] One eye frequency counter.
by "Ernest Rodriguez" <hitruz@hotmail.com>
- 97) [116971] DSP-10 demo in Enfield CT (very near CT/MA border) Tomorrow Jan 5
by "Lau, Zack, W1VT" <zlau@arrl.org>
- 98) [116972] Kit for ugly construction, from UK
by Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
- 99) [116973] Popular Electronics pages, with some Carl and Jerry stories
by Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
- 100) [116974] Re: ARRL Radio Designer
by John Seboldt K0JD <k0jd-1@seboldt.net>
- 101) [116975] Tube transmitters from our early days
by Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
- 102) [116976] my favorite Christmas present- O'scope clock
by Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
- 103) [116977] Re: [CONTEST] QRP Contest Calendar - Jan 2002
by Larry Cahoon <lejek@erols.com>
- 104) [116978] Re: 6 METER DX
by Bill ROWLETT <kc4atu@yahoo.com>
- 105) [116979] [Summary] Small Solar Panel
by "Steve Lawrence" <Steve.Lawrence@ITWFEG.COM>
- 106) [116980] No QRP at Salt Lake 2002 Winter Olympics
by "Bruce Prior" <n7rr@hotmail.com>
- 107) [116981] Re: Visual Acuity> bifocals
by baltimoremd@baltimoremd.com
- 108) [116982] Hello
by Dan Wolfe <n4roa@mounet.com>
- 109) [116983] Re: No QRP at Salt Lake 2002 Winter Olympics
by Bruce Muscolino <w6toy@erols.com>

Date: Thu, 3 Jan 2002 18:09:59 -0500
From: John R Kirby <n3aaz-qrp@juno.com>
To: qrp-l@Lehigh.EDU, gosier@twcnny.rr.com
Subject: [116875] George (N2JNZ / QRPp) The Winner
Message-ID: <20020103.192017.-180469.0.n3aaz-qrp@juno.com>
MIME-Version: 1.0
Content-Type: text/plain

Content-Transfer-Encoding: 7bit

From: n3aaz-qrp@juno.com
To: qrp-1@Lehigh.EDU
Date: Fri, 28 Dec 2001 09:46:26 -0500
Subject: QRPP Fall 2001 Up For Grabs

I am thinking of a number between one and one thousand . . .

X B Z Y T
K F F L C
T X P L S
T F C H C
Q T P Q C

From: "George Osier" <gosier@twcnny.rr.com>
To: <n3aaz-qrp@juno.com>
Date: Fri, 28 Dec 2001 11:06:53 -0500
Subject: Re: QRPP Fall 2001 Up For Grabs

Hello !!!!!

How about 509 ????????

73s George Osier , N2JNZ / QRPP

Yes, the best guess . . .

George,
please send me (direct) your snail mail address.

Congratulations es 73 . . .

John
N3AAZ
FM 19 xa

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Date: Thu, 3 Jan 2002 19:18:48 -0500
From: John R Kirby <n3aaz-qrp@juno.com>

To: qrp-1@Lehigh.EDU
Subject: [116876] Subject: SWR, Theroy vs. Real World Conditions
Message-ID: <20020103.192017.-180469.1.n3aaz-qrp@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Ron,

Thanks for sharing with us your 'Real World Conditions'.

I envy your antenna farm.

First hand experience is an outstanding teacher.

"KU7Y* Why a half wave (or multi of that) of feed line lets the rig "see" only the impedance of the antenna should be shown in the hand book. Or someone with better skills than I can do a good job of explaining that if it's needed. Contesters have used that "trick" for years and years. *KU7Y"

Ron, Your skills and articulation far exceed mine . . .
but I must say this . . .

I remember some 'tricks' too . . .

Trick 1 . . .

The half wave feed line repeats at it's INPUT exactly what it sees at it's OUTPUT.

Trick 2 . . .

The quarter line is just the opposite, if it sees an OPEN (circuit) at it's OUTPUT it reflects a SHORT circuit (to RF) at it's INPUT and that is why a quarter wave stub (connected in parallel with a feedline) makes an outstanding NOTCH filter.

>P>S>

Only 13 'tricks' exist in the 'Real World'.

73,
John
N3AAZ
FM 19 xa

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Date: Thu, 3 Jan 2002 19:21:02 -0500
From: "Bruce Shaw" <kg4dzu@ivwnet.com>
To: <lmairs@cox.rr.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [116877] Re: workbenches
Message-ID: <003401c194b6\$1c6319e0\$dfc4263f@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I found some white boards (up to 2ft x 4ft) that are made of some kind of particle board and then painted or coated with a very durable coating at Lowes and Home Depot. They are designed for modular shelving units but made a wonderful top of my workbench. I used a couple of large brackets to mount it to a wall in the garage and used some 1x2 to put an edge around it to keep things from rolling off. I mounted it almost chest high because I like to work standing up. The white surface makes it easy to spot parts and it is surprizingly difficult to mar with either tools or the soldering iron. I believe this kind of board is very inexpensive, in fact I think it was less than a similar sized piece of plywood.

72
Bruce
kg4dzu

Date: Thu, 3 Jan 2002 16:40:48 -0500
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>, <n3aaz-qrp@juno.com>
Subject: [116878] RE: Subject: SWR, Theroy vs. Real World Conditions
Message-ID: <NFBBKLDHALEHCJMAJPKFCEHBCIAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

OK - so what are the other 11?
Tracy N4LGH

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of
John R Kirby
Sent: Thursday, January 03, 2002 7:19 PM
To: Low Power Amateur Radio Discussion
Subject: Subject: SWR, Theroy vs. Real World Conditions

Ron,

Thanks for sharing with us your 'Real World Conditions'.

I envy your antenna farm.

First hand experience is an outstanding teacher.

"KU7Y* Why a half wave (or multi of that) of feed line lets the rig "see"
only the
impedence of the antenna should be shown in the hand book. Or someone
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better skills than I can do a good job of explaining that if it's needed.
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why a quarter wave stub (connected in parallel with a feedline) makes an
outstanding NOTCH filter.

>P>S>

Only 13 'tricks' exist in the 'Real World'.

73,
John
N3AAZ
FM 19 xa

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Date: Thu, 3 Jan 2002 19:39:21 EST
From: NB6M@aol.com
To: Boliver.Allmon@halliburton.com, QRP-L@lehigh.edu
Subject: [116879] Re: First Kit Suggestions?
Message-ID: <143.74f125f.296653b9@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi Boliver,

Even though you have not yet gotten your General Class license, and have no prior kit building experience, I would recommend the SW40+ from Small Wonder Labs as your first kit.

This is a very easy kit to build, and it is a very nice, complete transceiver for 40 Meters, with a VFO that will tune about 40 Khz of the band, perhaps a little more.

Sure, it is a little bit more complicated than some of the "two transistor" transmitters, or the NE602/LM386 Direct Conversion receivers, but the construction manual is very well thought out, the directions are clear and easy to follow, you will need very little test equipment to check it out and align it when you are finished, and, should you make a mistake and find that it doesn't work properly, there is a ton of info available via the Elmer/101 project, or through Dave Benson himself, to help get it going.

The Autumn, 1998 QRPP, a quarterly publication from the NorCal QRP Club, featured the SW40, and contained a set of complete instructions for building the kit, as well as test procedures and a complete explanation of the circuit. Back issues of QRPP are available from NorCal. The Elmer 101 info on the SW40 is available on the internet at:

<http://home.earthlink.net/~hamkitbuilder/elmer101.html>

All you really need are the ability to read and follow simple directions and the ability to make a good solder joint. For that, you need a low wattage soldering iron, some thin, silver content electronics solder, both of which are available at your local Radio Shack, and a little practice.

As for test equipment, a cheap digital voltmeter, such as the \$30 pocket digital multimeter available in the tool section at Sears, is almost a

necessity. When you buy one, if you don't have one already, one key ingredient to check, on the spec sheet for the meter, is that it has a 10 or 11 Megohm input impedance.

A resistive dummy load, made from either a 51 Ohm, two watt resistor, or three 150 Ohm, one watt resistors in parallel, and a simple RF probe, made following the circuit outlined in the ARRL Handbook (one .01 uf capacitor, one 4.7 Megohm resistor, one 1N34 diode), would complete the necessary lineup of test gear.

Actually, if you have a dummy load and a wattmeter with a QRP scale already, you could build the kit without the multimeter, except that it would be very nice to be able to use the Ohm Meter section to verify the value of each resistor before placing it on the circuit board. Of course, the Digital voltmeter and RF probe are invaluable for troubleshooting, should it come to that.

The only other thing that is needed, in order to align the receiver, is an antenna, which could be nothing more complicated than a length of wire.

On top of all that, the SW series kits are very reasonably priced. So even if you happened to destroy the whole thing, somehow, you wouldn't be out a fortune.

Check it out at <http://www.smallwonderlabs.com/>

I am sure you won't be disappointed.

72

Wayne NB6M

Date: Fri, 4 Jan 2002 18:48:40 -0600
From: "Mike Malone" <mmalone@worldlogon.com>
To: <fpqrp-1@mpna.com>
Cc: <qrp-1@lehigh.edu>
Subject: [116880] Re: [fpqrp] TRUFFLE warning
Message-ID: <000601c19582\$f5604a20\$6ef6a7cc@malonefamily>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

KD5KXF will be your truffle tonight. Sorry for the late notice. Look

around 7.044 to 7.047 and I will be listening up some. Special guest pig extroidanaire K4FB will be here as well. Hope to work a bunch of you. Again sorry about the late notice.

KD5KXF

If you see me, hold me there till I find myself... been that kind of day

Date: Thu, 3 Jan 2002 19:44:43 -0600
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "'mswmod@bigplanet.com'" <mswmod@bigplanet.com>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [116881] RE: SWR, Theroy vs. Real World Conditions
Message-ID: <01C1948F.18375C40.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi Ron, George and other fans of the output impedance controversy--

-----Original Message-----

From: Ron KU7Y [SMTP:mswmod@bigplanet.com]
Hi George and All,

But I ****think**** that the output of the matching network that is between the final device and the antenna connector is designed to transform the low or high impedance of the device (the input side of the network) to the nominal impedance of our antennas (the output side).

I'd say it the other way around. It transforms the impedance of the load to 50 ohms. Example, you want to tune your antenna with your Matchbox using your MFJ-259B. Where do you hook it? You disconnect the transmitter, hook the analyzer to the transmitter input of the matchbox and tune until it shows 50 ohms resistive. You didn't do any measuring of the transmitter.

To design the "matching" circuit to go between the amp and the antenna, don't you need to use both the impedance of the device at it's output side and the impedance of the load you want to see connected to it?

Depends. If you have a 200 ohm load and you want to transform it to 50 ohms, that's all you need to know. But if you want to match the 200 ohms to the impedance of an amplifier, you'd need to know that impedance. The "if" is key. You might want to in many cases (eg--maximum power transfer), but that's not always the case.

Don't get me wrong, I'm not looking for a bunch of math that I don't understand,
(it doesn't take much to get past my little bit of high school math!) but rather
a simple (if possible) explanation of how you make the "transformer" or whatever
it might be called.

Of course, it's different for different kinds of transformers. I need to go over how a simple "L" matcher works because it's so neat--but in a following post. [Guys like George have been doing these things since being in the crib, but I just went through and saw how it worked a couple years ago. I'm still impressed.]

But right now let me look at some simple "transmitters" that are or are not matched to the load. Some (not all) sources can be modeled as a Thevenin source, meaning a voltage source with a resistor in series. Whether this works for rf transmitters can produce some heated discussions. Things like feedback (ALC, SWR foldback) can screw it up. Please turn them off for this simple thought experiment.

I mentioned the mythical 100 watt transmitter the other day. But now I see that a 50 watter is more satisfying in terms of whole numbers and also for QRP. This is a 50 watt transmitter that "wants" a 50 ohm load. OK, so it could be:

#1: 50 volts with zero ohms internal impedance. [Efficiency: 100%]
#2: 75 volts with 25 ohms internal impedance. [Efficiency: 66%]
#3: 100 volts with 50 ohms internal impedance. [Efficiency: 50%] [Matched case]
#4: 150 volts with 100 ohms internal impedance [Efficiency: 33%]

(Each of the above cases produces 1 amp in the load. Add the internal impedance to the 50 ohm load and divide into the voltage.)

And so on. The point being, I gave it the 50 ohm load it "wanted"; it gave me the 50 watts out it promised--in every case. I'd like one like case #1, but the designer hasn't figured out how to build one like that. [Hey Glen L., how's that class E stuff coming?]

I look at the old rigs with the Pi networks and I ****remember**** (dangerous thing for us OF's to attempt doing!) that they were touted as being able to match the output of the tube to any load between XXX and XXX ohms.

Good example. I'm not really an expert (I just play one on QRP-L), but in many cases here I suspect we are going for the matched condition. But in some cases (besides the old Novice 75 watt limitation) the manual may say, don't exceed ### ma of plate current--that's all the tube can stand. So, we don't try for the perfect match in all cases.

Where am I going wrong in my thinking?

I don't think you're too far wrong. Your examples make me think we toss around the "M-word" (match) too much without thinking of whether we are adjusting for a "match" of source and load impedances or adjusting to provide the load the source is designed to work with.

Consider my case #2 again. If I matched the 25 ohm internal impedance, I'd get lots more power output, but efficiency would drop from 66% to 50% and internal dissipation would more than double.

And you don't need to be "new" to learn from this list. Look at me..... I've been licensed since 52 (I think.....maybe 53) and I still learn something almost every time I read the list.

Likewise--licensed 40 years as of the 12th of this month. Still learning (and unlearning) stuff.

But everyone....don't forget the object of the original post..... don't worry about a small amount of SWR. If it's less than 3:1 most rigs will work just fine. If you have a tuner don't be afraid to use it. Bottom line????

Absolutely

OK, back in my hole.....

Ron, KU7Y

Back on my head

72--Nick, WA5BDU

Date: Thu, 3 Jan 2002 20:43:50 -0500
From: "Mike Branca" <w3irz@att.net>
To: <qrp-1@Lehigh.EDU>
Subject: [116882] Re: workbenches
Message-ID: <093601c194c1\$42e3aa20\$d8eb5b0c@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

More ideas. Since my workbench which I built in 1956 and is 2 ft by 8 ft seems to be always filled up with test gear and parts I found a solution. I have a 55 gallon drum that stands right in front of the bench. On top is a 24 inch piece of a laminated wood 28 inch door. A couple of coats of poly makes a nice surface. Three screws on the bottom keep the top from sliding off. This is my one project bench and is where I do all of my assembly and testing. I can roll up my spectrum analyzer and scope to this bench as well as work on the project from all sides. The most important part is that it never gets cluttered. I use a pound or two of solder a year so this bench is for work not show.

Mike Branca W3IRZ in Conyers Georgia

Date: Thu, 3 Jan 2002 21:05:15 -0500
From: "Tom" <thom2@worldnet.att.net>
To: <brian@iquest.net>,
 "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [116883] Re: SKN and the hunt for WAS
Message-ID: <00b401c194c4\$41f28c00\$b6dd580c@1xjhu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Gang,

Just going thru my log from SKN..worked Fred K5QLF. I couldn't get him to tell me if that was a vanity call or not...he had a pretty darned good fist though.

Tom

WB2QDG

(not a vanity call, but I am vain)

Date: Thu, 3 Jan 2002 18:06:33 -0800
From: "Roger A. McCarty" <rmccarty@earthlink.net>
To: <k7on@earthlink.net>,
 "'Low Power Amateur Radio Discussion'" <qrp-l@lehigh.edu>
Subject: [116884] RE: Workbench Top Recommendations?
Message-ID: <000601c194c4\$6ec9bbe0\$2802a8c0@RAMcCarty>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

A Challenge!

Not exotic but a good all purpose work bench;

www.qsl.net/kd6cc/workbench.jpg

The bench is 8 Ft. wide and 8 Ft. tall at the back of the bench. No feet to get in the way. The table height was chosen to allow using a bar stool as a seat, and yet you can stand and still be at a comfortable viewing height if you find it necessary to peer over something.

I was working on tube type audio equipment at the time this photo was taken.

Roger KD6CC

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf

Of Brian Short

Sent: Thursday, January 03, 2002 10:20 AM

To: Low Power Amateur Radio Discussion

Subject: Re: Workbench Top Recommendations?

>So ... what does your work bench look like? How did you make it?

>I bet few of you have anything exotic.

>

>72, Paul NA5N

Date: Fri, 04 Jan 2002 02:06:50 +0000

From: "Leon Heller" <leon_heller@hotmail.com>

To: lmairs@cox.rr.com, qrp-l@Lehigh.EDU

Subject: [116885] Re: Fading Visual Acuity

Message-ID: <F1609T3TGJ2TUSzbAUf00016273@hotmail.com>

Mime-Version: 1.0

Content-Type: text/plain; format=flowed

>From: "Lee Mairs" <lmairs@cox.rr.com>

>Reply-To: lmairs@cox.rr.com

>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

>Subject: Fading Visual Acuity

>Date: Thu, 3 Jan 2002 18:51:58 -0500

>

>I went to my optometrist and had her make me up a set of bi-focals where

>the

>bottom reading part was jut what was required for reading, but the upper

>part had a focal length such that I could see across the bench. These have

>worked great, until this SMT stuff came along...

At nearly 60, I have the same problem. I use an illuminated magnifier that
clamps to the edge of the bench.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>.

Date: Thu, 3 Jan 2002 20:09:41 -0600
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "Low Power Amateur Radio Discussion (E-mail)" <qrp-1@Lehigh.EDU>
Subject: [116886] RE: Workbench Top Recommendations?
Message-ID: <01C19492.9579AD40.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

-----Original Message-----
From: Paul Harden, NA5N [SMTP:na5n@rt66.com]

Paul said:

So ... what does your work bench look like?

Let me grab a shovel and I'll tell 'ya.

Oh yeah--community center type folding tables--6 footers. Zero installation time. And if your wife should decide that you have to swap rooms with your daughter for some bizarre reason--one less thing to have to tear out.

Simulated wood grain top goes well with solder iron burns.

Now--about static discharge. Never gave it that much credence myself. But prophets of static doom have gotten me to performing certain superstitious rituals. Before grabbing a chip or FET, I'll usually touch the metal leg of the table with my big toe (I've usually got my shoes off.). And with Manhattan style, I'll touch the bare board and shake the part out of its anti-stat bag onto the board before picking it up. There--we're all at the same potential. I'm more cautious in winter than during the steamy monsoons of an Arkansas summer.

Here's a safety tip for ya--when working with DIP chips--don't go walking around the work area barefoot!! Voice of experience! Ever had 14 little vampire bites spaced in two 0.1 inch lines on the sole of your foot?

72--Nick, WA5BDU

Date: Thu, 3 Jan 2002 19:18:42 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-1@lehigh.edu>
Subject: [116887] FOX: One down fast!
Message-ID: <Pine.LNX.4.33.0201031912590.3679-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Boy with Larry N2WW being near home in CO I put on my cloud warmer antenna (80 meter center fed dipole) and worked him right after Doc K0EVZ who was first again! It's a setup I'm sure. Larry worked him simplex and THEN did cq fox u, and I got him 1.5 KHz higher. So half done.

I think with ESP signal strength that VE3FAL is on 7040 and I do hear a tu and snatches of words but at low signal strength even on the killer vertical.

--
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Fri, 04 Jan 2002 02:16:24 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: kandrparker@sympatico.ca, qrp-1@Lehigh.EDU
Subject: [116888] Re: Workbench Question?
Message-ID: <F41bDt3HvoFOAmEaJsw000161fa@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

I use a large computer desk. I've got two heavy Marconi 2019A synthesised signal generators and they need something substantial.

For metalwork and similar activities I have a small steel bench which holds my Taig Microlathe, drill press, vise, etc.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

Send and receive Hotmail on your mobile device: <http://mobile.msn.com>

Date: Thu, 3 Jan 2002 19:25:37 -0700 (MST)

From: "Karl F. Larsen" <k5di@zianet.com>

To: John R Kirby <n3aaz-qrp@juno.com>

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [116889] Re: Subject: SWR, Theroy vs. Real World Conditions

Message-ID: <Pine.LNX.4.33.0201031923130.3692-1000000@Daisy.dog>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

This is all nice theory but too often the antenna is multiband and or ... so I'm an avocate of the MFJ Antenna Analyser that you can with batteries operate on the roof or tower 5 feet from the feed point. Here you read what the antenna feed point really looks like.

On Thu, 3 Jan 2002, John R Kirby wrote:

>
> Ron,
>
> Thanks for sharing with us your 'Real World Conditions'.
>
> I envy your antenna farm.
>
> First hand experience is an outstanding teacher.
>
> "KU7Y* Why a half wave (or multi of that) of feed line lets the rig "see"
> only the
> impendence of the antenna should be shown in the hand book. Or someone
> with
> better skills than I can do a good job of explaining that if it's needed.
> Contesters have used that "trick" for years and years. *KU7Y"
>
> Ron, Your skills and articulation far exceed mine . . .

> but I must say this . . .
>
> I remember some 'tricks' too . . .
>
> Trick 1 . . .
> The half wave feed line repeats at it's INPUT exactly what it sees at
> it's OUTPUT.
>
> Trick 2 . . .
> The quarter line is just the opposite, if it sees an OPEN (circuit) at
> it's OUTPUT it reflects a SHORT circuit (to RF) at it's INPUT and that is
> why a quarter wave stub (connected in parallel with a feedline) makes an
> outstanding NOTCH filter.
>
> >P>S>
> Only 13 'tricks' exist in the 'Real World'.
>
> 73,
> John
> N3AAZ
> FM 19 xa
> -----
> GET INTERNET ACCESS FROM JUNO!
> Juno offers FREE or PREMIUM Internet access for less!
> Join Juno today! For your FREE software, visit:
> <http://dl.www.juno.com/get/web/>.
>

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Thu, 03 Jan 2002 21:30:47 -0500
From: lenny wintfeld <w2bvh@home.com>
To: "[Low Power Amateur Radio Discussion]" <qrp-1@Lehigh.EDU>
Subject: [116890] 70.7 volt line-to-voice-coil transformer. What is it?
Message-ID: <3C3513D7.7AF6F7A8@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi

70.7 volt Line-to -voice-coil transformers used to be offered in all the old ('60's) Lafayette and Allied catalogs. I always wondered what they were, but never asked. They're obviously some kind of audio coupling transformer. And they're obviously antiques: I see about as many of them offered as modulation transformers i.e. none.

73,

Lenny W2BVH

Date: Fri, 04 Jan 2002 02:35:51 +0000
From: Arthur Moe <kb7ww@uswest.net>
To: qrp <qrp-1@Lehigh.EDU>
Subject: [116891] WHERE'S THE OTHER FOX
Message-ID: <3C351507.B918EC1D@uswest.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Worked Larry FB but not hearing other fox

Date: Fri, 04 Jan 2002 02:41:32
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: kb7ww@uswest.net, qrp-1@Lehigh.EDU
Subject: [116892] Re: WHERE'S THE OTHER FOX
Message-ID: <F1366uR1P1TIU6YPZ1600010a99@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

i worked fred near 7032.5

Join the world s largest e-mail service with MSN Hotmail.
<http://www.hotmail.com>

Date: Thu, 3 Jan 2002 19:46:47 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-l@lehigh.edu>
Cc: <QFOX@yahoogroups.com>
Subject: [116893] FOX: Anyone hear VE3FAL?
Message-ID: <Pine.LNX.4.33.0201031943380.3728-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

The band is in GREAT shape tonight but I don't hear this Fox. Does anyone hear him? Also the QRP-L list is very slow. Just got a truffle announcement...hi

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Thu, 3 Jan 2002 21:45:05 -0500
From: "Carter Craigie N3AO" <n3ao@bee.net>
To: "Low Power Amateur Discussion" <qrp-l@Lehigh.EDU>
Subject: [116894] Where that rascally VE3FAL?
Message-ID: <026b01c194c9\$d2ad61c0\$8e60c441@satellite>

OK, this hound's nose is having a tough time! Any other hounds sniffed him out yet?

Carter Craigie N3AO
EPA QRP Nr. 13
K2 Nr. 678
K1 Nr. 159

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.311 / Virus Database: 172 - Release Date: 12/27/2001

Date: Thu, 3 Jan 2002 21:47:59 -0500
From: "Tom" <n1tp@worldnet.att.net>
To: "qrp-1@Lehigh.EDU" <QRP-L@LEHIGH.EDU>
Subject: [116895] FOX: VE3FAL
Message-ID: <004701c194ca\$39264ac0\$6e8e4d0c@tom>

7.032.40 listening 0.5 to 1.0 UP.

Tom, N1TP
Naples, Florida

Date: Thu, 03 Jan 2002 20:56:02 -0600
From: "George , W5YR" <w5yr@att.net>
To: netxqrp@mailman.qth.net, qrp-1@Lehigh.edu
Subject: [116896] A Good Week
Message-ID: <3C3519C2.C505911C@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Been a good week in the Yellow Rose Garden!

Tuesday night got the Truffle and the Cub Fox.

Tonight, Larry made me work for it but finally got my signal where his receiver was at 0235 for that pelt.

Then started looking around for Fred and finally heard him calling QRZ on 7032.52 and skunk-strong! One call and back he comes for pelt number 2.

So a Grand Slam Sweep for this week.

"... and it just keeps getting better!" <:}

Good luck to all and everyone hold a good thought!

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6

Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Date: Thu, 3 Jan 2002 20:58:27 -0600
From: "T.E. 'Doc' Drake - W5TB" <w5tb@arrl.net>
To: <n3ao@bee.net>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [116897] Re: Where that rascally VE3FAL?
Message-ID: <001e01c194cb\$aafa6ca20\$0200a8c0@altn1.tx.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: quoted-printable

The NAFTA highway normally runs true and sweet from TX to ON but not a =
sniff of the fox do I hear -- rumored to be among our Spanish speaking =
friends about 7032. N2WW loud and clear further up the band -- one fox =
in the bag the other may elude ;-)

73, T.E. 'Doc' Drake, W5TB
Arlington, Texas
FISTS # 5365 QRPARCI # 3532 ARRL Life Member K1 #181 K2#1617

----- Original Message -----=20
From: "Carter Craigie N3AO" <n3ao@bee.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, January 03, 2002 8:45 PM
Subject: Where that rascally VE3FAL?

> OK, this hound's nose is having a tough time! Any other hounds =
sniffed him
> out yet?

>=20

> Carter Craigie N3AO
> EPA QRP Nr. 13
> K2 Nr. 678
> K1 Nr. 159

>=20

>=20

> ---

> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (<http://www.grisoft.com>).
> Version: 6.0.311 / Virus Database: 172 - Release Date: 12/27/2001

>=20

>=20

Date: Thu, 3 Jan 2002 22:02:33 -0500
From: "Carter Craigie N3AO" <n3ao@bee.net>
To: "Low Power Amateur Discussion" <qrp-1@Lehigh.EDU>
Subject: [116898] VE3FAL run to ground!
Message-ID: <02a301c194cc\$43adfe00\$8e60c441@satellite>

I found him listening on 7.033.82.

I heard him on 7.032.60

Carter N3AO

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.311 / Virus Database: 172 - Release Date: 12/27/2001

Date: Thu, 3 Jan 2002 19:06:00 -0800
From: "Trevor Jacobs" <fxtech@earthlink.net>
To: <k5di@zianet.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [116899] Re: One down fast!
Message-ID: <009f01c194cc\$bdb9e380\$a99ab2d1@tjacobs>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

This is a first, The first time I sent my call Larry came right back with it!!! Thanks for the Pelt Larry, Great signal into Burbank tonight.

Best 72/73's
Trev
KG6CYN

----- Original Message -----
From: Karl F. Larsen <k5di@zianet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: Thursday, January 03, 2002 6:18 PM
Subject: FOX: One down fast!

>
> Boy with Larry N2WW being near home in CO I put on my cloud warmer
> antenna (80 meter center fed dipole) and worked him right after Doc
K0EVZ
> who was first again! It's a setup I'm sure. Larry worked him simplex
and
> THEN did cq fox u, and I got him 1.5 KHz higher. So half done.
>
> I think with ESP signal strength that VE3FAL is on 7040 and I do
> hear a tu and snatches of words but at low signal strength even on the
> killer vertical.
>
> --
> Yours Truly,
>
> - Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
> <http://www.zianet.com/k5di/>
>
>

Date: Thu, 3 Jan 2002 21:10:07 -0600
From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [116900] RE: 70.7 volt line-to-voice-coil transformer. What is it?
Message-ID: <01C1949B.0621BA80.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Can't say I've worked with it a lot, but I recall them being used in a power plant where I work. As I understand it, the PA system for the facility would put out 70.7 volts RMS at rated power on sort of a bus. Now, 70.7 squared is 5000. Divide that by the impedance you connect to it to get the power your speaker will draw.. So you'd hook up speakers that had transformers with multiple impedance taps. Need 50 watts for a big area? Tap at 100 ohms. Need 5 watts for an office area? Tap at 1000 ohms.

Hey--it's sort of like our discussion on transmitter output impedances.

I've got some of those crazy things in the attic. I'll figure out a use someday.

72--Nick, WA5BDU

-----Original Message-----

From: lenny wintfeld [SMTP:w2bvh@home.com]
Sent: Thursday, January 03, 2002 8:31 PM
To: Low Power Amateur Radio Discussion
Subject: 70.7 volt line-to-voice-coil transformer. What is it?

Hi

70.7 volt Line-to -voice-coil transformers used to be offered in all the old ('60's) Lafayette and Allied catalogs. I always wondered what they were, but never asked. They're obviously some kind of audio coupling transformer. And they're obviously antiques: I see about as many of them offered as modulation transformers i.e. none.

73,

Lenny W2BVH

Date: Thu, 3 Jan 2002 21:11:59 -0600
From: "T.E. 'Doc' Drake - W5TB" <w5tb@arrl.net>
To: <n3ao@bee.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [116901] Re: VE3FAL run to ground!
Message-ID: <002a01c194cd\$93395860\$0200a8c0@altn1.tx.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: quoted-printable

yup - Fred is weak here but running true at 7032.3 up 1 - the NAFTA =
highway came thru once more - 2 foxii in the bag and a happy dance at =
W5TB

Go Prairie Dogs!

73, T.E. 'Doc' Drake, W5TB
Arlington, Texas
FISTS # 5365 QRPARCI # 3532 ARRL Life Member K1 #181 K2#1617
----- Original Message -----=20
From: "Carter Craigie N3AO" <n3ao@bee.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, January 03, 2002 9:02 PM
Subject: VE3FAL run to ground!

> I found him listening on 7.033.82.
>=20
> I heard him on 7.032.60
>=20
> Carter N3AO
>=20
>=20
>=20
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (<http://www.grisoft.com>).
> Version: 6.0.311 / Virus Database: 172 - Release Date: 12/27/2001
>=20
>=20

Date: Thu, 03 Jan 2002 18:45:28 -0700
From: Ron KU7Y <mswmod@bigplanet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116902] Re: Workbench Top Recommendations?
Message-ID: <000901c194c5\$558f3000\$d9c0a9d8@oemcomputer>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7bit

Hi All,

No need for anything fancy in a work bench. I had 3 at work that were plywood. They must be well over 30 years old and still going strong.

I don't worry about ESD very much. When working as a tech. in a 2 way radio shop I was taught to touch the chassis of the radio before touching the parts. I was told that this will give a path to discharge any static you have without causing any damage to the radio. While I'm sure this will bring on a few posts about how you have been getting "unseen" and "unknown" damage for years, I just don't worry about it. I'd rather replace a part, if I really ever hurt one, than spend all the time and money trying to avoid it.

Important things for a work bench..... have it slope JUST A LITTLE BIT toward the back to keep small parts from rolling off onto the floor. Put in a LOT of outlets. Have most of them controlled by a switch close to the work bench to

kill the power to everything you are working on and with.... things like the soldering iron, rig, power supply and etc. For those things like a frequency counter that you might want to leave the ocs heater on, have one or two 4plex's that are always on. Paint these something like red so you know they are always on.

Keep a light plugged into one of the switched outlets and leave the switch on the light in the on position always. When the light is ON the projects are ON. Hard to forget and leave things on all night or day that way.

Decide if you want to work sitting down or standing up. If it's sitting, will you use a stool or chair? I prefer standing at home. I had to sit at work. (I also had my reloading presses on the same work bench most of the time and that works best for me when standing). Install the bench at the right height for YOU.

Then turn on the soldering iron, melt some nasty old lead solder, smell the fumes and go make some CW contacts. If the key starts slipping around the table, break out the super glue and..... well, you get the picture. :-)

When I could find a good price, as in almost free, I liked using white kitchen counter tops for work benches.

How did I keep from losing too many SMT parts? I only took out of the holder the part I was ready to solder into place.

Blessed is he who has a wife that can look at his workbench and not tell him that it needs to be cleaned up! :-)

OK, repeat after me.... KISS, KISS, KISS and FUN, FUN, FUN.

Now it's back into my hole.....

Ron, KU7Y
ku7y@qsl.net
Full Time RVing somewhere in the West
Currently in Brenda, AZ.

Date: Thu, 3 Jan 2002 22:40:18 -0500
From: "Brian Murrey" <brian@iquest.net>
To: "Pigs" <fpqrp-1@mpna.com>, "QRP-L" <qrp-1@Lehigh.EDU>
Subject: [116903] January surplus parts
Message-ID: <021101c194d1\$88292c80\$75372bd1@bmurrey2K>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

This month my junk box is getting a bit thin. This is what I have as available surplus.

Parts for Sale as of 01/01/2002
=====

Caps

=====

NEW .1 uF Poly/Film caps - 10% 250v, new stock, paper tape, nice long leads. These are not NPO and are made by S&M Components
50/\$3.00 or 100/\$5.00

NOS .01 uF ceramic caps, 10% 100v brand new by Kyocera
50/\$3 or 100/\$5

NOS 1000pf blue mono caps, 10% 100
50/\$3 or 100/\$5

NOS 470pf ceramics on paper tape, rated 5%
50/\$3 or 100/\$5

NOS 12pf NPO ceramics on tape
50/\$4 or 100/\$7

22uF 35v electrolytics These caps are on paper tape, NOS (New, but old stock) made by Richey.
100/\$2

Connectors

=====

I have NEW BNC chassis connectors for (includes nut and lock washer)

=====

25 for \$14.00
50 for \$24.00
100 for \$40.00

Voltage Regulators

=====

LM7805C voltage regulators. T0220 case. 5 for \$4.00
L7806CV voltage regulators. T0220 case. 5 for \$4.00
LM7808CT voltage regulators. T0220 case. 5 for \$4.00
LM7812T voltage regulators. T0220 case. 5 for \$4.00

3 of each for \$10 (12 total VR's)

Key/Headphone Jacks

=====

These are 3.5mm female stereo PCB mount jacks. Can be used in ugly/manhattan building projects with no problems.

3/\$1.35 (or send a buck and a stamp)

Transistors

=====

2N2222A'S in plastic T092, NPN - 50/\$4.50 NEW PARTS

2N3906's plastic T092. PNP - 50/\$4.00 NEW PARTS

2N3704's plastic T092, NPN - 50/\$4.00 NEW PARTS

I AM OUT OF METAL 2N2222'S!!! BUMMER!!

IRF540's TMOS Power FET, N-Channel, 27A, 100v RDS(on) = .070 Ohms

<http://www.onsemi.com/pub/Collateral/IRF540-D.PDF> for data sheet

\$1.00 each.

BC847B - Surface Mount NPN's, general purpose

CBO = 50v, CEO = 45v, EBO = 6v, Collector Current Max = 100 mA,

electrical characteristic curves for this unit are the same as the PN2222A, SST222A, MMST2222A, and UMT222A transistor. These are new stock, on SM tape.

100pcs/\$2.50

2N7200 MOSFET - 5/\$2 10/\$3.50

Crystals

=====

3.579545 Mhz Crystals for 80m - These are pulled colorburst crystals, 2/\$1

POTS - USED

=====

10K 1 Turn Panel mount pots. These are pulls. No knobs, just shafts. Most are Allen Bradley. Pot is about as big as a quarter. With nut. 5/\$4.00

Diodes

=====

1N4148 - You always need these. 75 for \$2.00 These are NEW.

Let me know if you're interested. All prices are post paid to the USA, unless otherwise noted. I will ship to non USA addresses but we need to discuss the shipping charges first.

=====
KB9BVN/QRP - New Whiteland IN - EM69WN
QRP-ARCI #10223 QRP-L #1540 FIST #5695
FISTS CC #764 - Proud Member ARRL
TEN TEC SCOUT @ 5W or NORCAL 40A @ 1.3W
INTO INFAMOUS AF4PS ATTIC DIPOLE
SOC #400 AND FLYING PIGS QRP #-57
=====

Date: Thu, 3 Jan 2002 22:38:06 -0500
From: "ss lyon" <sslyon@megalink.net>
To: <leon_heller@hotmail.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [116904] Visual Acuity> bifocals
Message-ID: <001301c194d1\$392227e0\$038798ce@megalink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

After many years of stumbling, neck kinking, and pestering optometrists, I finally have a combo that works great for me. The first part was learning how to do an eye test by letting the clear image come to me rather than straining for it. The next part was to have my "reading" lenses ground for depth of field centered at arm's length so that I can see easily to read, the computer, my dashboard, negotiating stairs, etc. The depth of field at this greater length is much better than when they were cut for nominal 18" "reading" distance. They are also ground quite high on the lens (>50%) so that I don't have to kink my neck back when looking at close things at eye level. For close work (wiring, removing slivers...) I use the head band optics with selectable magnification, or, stack cheapo drug store magnifying glasses on my beak if I'm away. No more trifocals, or even more critical... the varilux, which make head positioning very tiring. Finally, the new "stylish" small glasses were too restrictive, so I went back to large glass "aviator" style for maximum peripheral freedom. I'm happy as a clam now.

73

AA1MY

Seabury & Sharon Lyon

99 Sparrowhawk Mtn Rd
Bethel ME, 04217 U.S.A.
207-836-2576

Virus Protection by Norton and ZoneAlarm

----- Original Message -----

From: "Leon Heller" <leon_heller@hotmail.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Thursday, January 03, 2002 9:06 PM

Subject: Re: Fading Visual Acuity

>

>

>

> >From: "Lee Mairs" <lmairs@cox.rr.com>

> >Reply-To: lmairs@cox.rr.com

> >To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

> >Subject: Fading Visual Acuity

> >Date: Thu, 3 Jan 2002 18:51:58 -0500

> >

> >I went to my optometrist and had her make me up a set of bi-focals where

> >the

> >bottom reading part was jut what was required for reading, but the upper

> >part had a focal length such that I could see across the bench. These

have

> >worked great, until this SMT stuff came along...

>

> At nearly 60, I have the same problem. I use an illuminated magnifier that

> clamps to the edge of the bench.

>

> 73, Leon

> --

> Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

> My web page: http://www.geocities.com/leon_heller

> My low-cost Altera Flex design kit: <http://www.leonheller.com>

>

>

>

> -----
> Get your FREE download of MSN Explorer at
<http://explorer.msn.com/intl.asp>.

>

Date: Thu, 3 Jan 2002 22:45:58 -0500

From: "ss lyon" <sslyon@megalink.net>

To: "chat qrp" <qrp-1@lehigh.edu>
Subject: [116905] vision... new developments
Message-ID: <004901c194d2\$52423c00\$038798ce@megalink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Coincidentally, there is hope for the seriously vision impaired. Check out the bionic eyes at
http://science.nasa.gov/headlines/y2002/03jan_bioniceyes.htm?list465913 .
Looks like semiconductor
device technology has made another great leap for mankind.
73
AA1MY

Seabury & Sharon Lyon
99 Sparrowhawk Mtn Rd
Bethel ME, 04217 U.S.A.
207-836-2576

Virus Protection by Norton and ZoneAlarm

Date: Thu, 03 Jan 2002 22:44:01 -0500
From: David Hinerman <wd8civ@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [116906] Re: workbenches
Message-ID: <3.0.6.32.20020103224401.00798590@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 08:43 PM 1/3/02 -0500, you wrote:
>More ideas. Since my workbench which I built in 1956 and is 2 ft by 8 ft
>seems to be always filled up with test gear and parts I found a solution. I
>have a 55 gallon drum that stands right in front of the bench. On top is a
>24 inch piece of a laminated wood 28 inch door. A couple of coats of poly
>makes a nice surface. Three screws on the bottom keep the top from sliding
>off. This is my one project bench and is where I do all of my assembly and
>testing. I can roll up my spectrum analyzer and scope to this bench as well
>as work on the project from all sides. The most important part is that it
>never gets cluttered. I use a pound or two of solder a year so this bench
>is for work not show.

Now that just makes sense. I know amateur telescope makers use such an

assembly for grinding mirror, but it makes sense to put a piece of gear on it - you can get at it from all sides then.

Dave

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Thu, 3 Jan 2002 23:01:59 -0500
From: "Stephen M. King" <frastephen@home.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [116907] Fox Catcher
Message-ID: <004b01c194d4\$8fedf9c0\$eb600c18@burl1.nj.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

The skip was long tonight! Usually Fred, VE3FAL, booms in here, but tonight Larry, N2WW, was booming! Got 'em both in the last 10 minutes! That was close!

Tally Ho!

Peace and 73,
Stephen
W3SMK

Date: Thu, 03 Jan 2002 22:20:37 -0600
From: "George, W5YR" <w5yr@att.net>
To: Ron KU7Y <ku7y@qsl.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [116908] Re: SWR, Theroy vs. Real World Conditions
Message-ID: <3C352D95.C4C26A67@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Interesting response, Ron, and as usual you give me a lot to think about.

Just a few notes here and there:

Ron KU7Y wrote:

>

> However, I don't mind the term "output impedance" but can see George's point
> too. What I was meaning by that term was the output impedance is what you need
> to connect to the antenna fitting. If that isn't really 50 ohms on the rig side
> and is something else that just needs to have 50 ohms connected to it then OK.
> But I **think** that the output of the matching network that is between the
> final device and the antenna connector is designed to transform the low or high
> impedance of the device (the input side of the network) to the nominal impedance
> of our antennas (the output side).

It is very easy to get tripped up on words that mean different things to different people. The "output impedance" of a device, active or passive, is generally understood to mean the impedance that is seen at the output when one "looks" back into the device from the output terminals. It is a property of a linear network independent of whatever the network is connected to.

You are choosing to use "output impedance" to denote the impedance of the **load** that you attach to the output terminal. But, these can be two greatly different values, as well as different "things" according to stricter definitions.

The first is a property of the device, independent of anything else, while the second is the load presented to the device, and which may or may not be independent of the "output impedance" of the device. See, already our words are getting in the way! <:}

At the risk of blowing a few minds, let me add that impedance as a concept is a frequency-dependent entity based upon sinusoidal waveforms. So, how do you describe the impedance in a circuit where the waveforms are not sinusoidal? As in the output of a Class C amplifier? One must be very careful when tossing the notion of impedance around and even more so when talking about matching the beasties.

It is true that a matching network is required in the amplifier, be it solid-state or hollow-state, to bring the impedance required by the active devices for a load to a value that usually is more useful. For example, tubes generally like loads in the thousands of ohms while FETs and transistors may have optimum loads of only a few ohms or less. Neither of these extremes is particularly convenient.

So, a matching network is used to allow convenient loads, like 50-ohm resistors and 50-ohm terminated coax to be used. The networks also have the convenient property of acting as filters to take in non-sinusoidal

waveforms at their input and squirt out sinusoidal waveforms at their output. So, now we can talk about "impedance" and be on firm ground. But looking back into that network to the input where non-sinusoidal waveforms exist is a whole different thing: "there be dragons!"

So, and here is the hooker, just because the transmitter ultimately demands a 50 ohm load to produce rated power at specified efficiency and distortion, etc., does not necessarily mean that its output impedance is 50 ohms. And that is what starts to confuse people. They remember the maximum power theorem from school and instinctively reason that if the required load is 50 ohms, then the device must have a 50 ohm internal impedance or output impedance. That *can* be the case or it may not be.

Warren Bruene has made measurements showing a fairly wide range of output impedances for a transmitter while Walt Maxwell has made measurements just as accurately, etc, that show that the transmitter he tested had an output impedance of almost exactly 50 ohms.

The amazing thing here is that if the maximum power theorem *were* applicable, we would have a maximum efficiency of 50% in our rigs! Half the d-c input power would go to heat up this mystical "internal impedance" and the other half would appear in the output to work the Fox. Since that is not what we observe, then obviously that is not a true picture of the situation. That fact alone is almost enough to "prove" that a transmitter requiring a 50 ohm load does *not* have a 50 ohm internal impedance.

As I said before, it actually doesn't matter, because the designer doesn't do his thing to achieve a certain output impedance. He cares nothing about what it is and usually doesn't even know. What he does care about, very much, is what value of load resistance his transmitter is going to be used with. That magic number plays the major role in his design process.

>

> I realize that I'm showing my ignorance here but that's how we learn.....or me
> at least! To design the "matching" circuit to go between the amp and the
> antenna, don't you need to use both the impedance of the device at it's output
> side and the impedance of the load you want to see connected to it?

Not exactly in that way. What happens is that the guys who made the tubes or transistors or whatever decided that their devices used in a particular circuit under particular operating conditions - d-c voltages and currents and r-f drive, etc. - had to see a certain special value of load resistance in order to put out "rated" power without excessive distortion and without overheating. That load resistance value is related in a very complex way to the characteristic curves and operating points, etc. of the devices, but does not mean much to the ultimate user of the transmitter. And it almost always is never the actual load required at the antenna terminals of the transmitter. Usually it is way too high or way too low.

>

> Don't get me wrong, I'm not looking for a bunch of math that I don't understand,
> (it doesn't take much to get past my little bit of high school math!) but rather
> a simple (if possible) explanation of how you make the "transformer" or whatever
> it might be called.
>
> I look at the old rigs with the Pi networks and I **remember** (dangerous thing
> for us OF's to attempt doing!) that they were touted as being able to match the
> output of the tube to any load between XXX and XXX ohms.
>
> Where am I going wrong in my thinking?

You aren't, Ron. The active devices themselves in a particular circuit configuration with certain applied d-c voltages and r-f excitation demand a certain load resistance in order to work "right" as I have described above. The engineers design a network that will transform the desired ultimate output load resistance - usually 50 ohms these days - down or up to the required load resistance for the devices. As frequency goes up, there are reactances to be considered as well, so the matching network also has some reactance cancellation work to do.

Those old rigs had variable tank circuit components that allowed the *user* to match whatever load he happened to want to use to the tubes, for example. Dip the final, increase the load, dip the final again, increase the load, etc. until you got the right plate current with the recommended grid drive and you ended up with the desired output without the plates getting too red.

Nowadays, users are spared all that, but at a price: the rigs want to see only one specific load resistance and get picky when they don't. The guys in the factory or writing the construction article figure out how to make a 50-ohm resistor look like the proper load for their amplifier devices. They build it in or show you how to. No more adjustments since usually these networks can be made broadband to cover all of a band or several bands.

What has happened since the "good old days" with the PI networks, etc. is that the user-tunable part of the transmitter has been moved outside the cabinet into another box called the "tuner." There the user is free to use whatever load impedance he desires as long as the tuner components and settings can produce a 50-ohm resistive impedance at the tuner input for that picky transmitter to work on.

Most transmitters use protective circuitry and/or internal "tuners" to ensure that their 50-ohm load requirement is met despite what the user connects up to the output spigot.

>
> To me this point, the output of the rig at the antenna terminal, can be called
> the output impedance of the rig. I don't mean to argue but say this because
> that term

> seems to "feel" right to me. (And my having heard it and used it for about 50
> years might have something to do with it too!).

Probably a lot of people feel the same way, Ron, but the engineers who do this sort of thing for a living hold a different view and use that term to mean something else completely. The safe thing to say is that the transmitter demands a certain load resistance in order to perform to spec - period. How that load value relates to anything inside the box is a whole other and very complex issue. Fortunately, it has nothing to do with how we actually use our equipment.

>

> And you don't need to be "new" to learn from this list. Look at me..... I've
> been licensed since 52 (I think.....maybe 53) and I still learn something almost
> every time I read the list.

Me, too, Ron - and a lot of my learning comes from trying explain things like this to other people. I learned early on that teaching is the most effective way to learn something. If you can't explain something so that someone else can understand it, then you probably don't understand it yourself.

t

>

> But everyone....don't forget the object of the original post..... don't worry
> about a small amount of SWR. If it's less then 3:1 most rigs will work just
> fine. If you have a tuner don't be afraid to use it. Bottom line????

>

> Get on the air and have some fun!

>

> And George, please don't take this post wrong. I really am just trying to learn
> too!

No problem with me, Ron - you know better than that. I just regret having to use so many words to say what I am trying to say. I know that a lot of guys on the list could care less about all this, but maybe a few will read it and pick up something.

Thanks for the use of the pulpit! <:}

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe SOC 262 COG 8
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All incoming and outgoing email virus-checked by Norton Anti-Virus 2002

Date: Thu, 3 Jan 2002 23:25:33 -0500
From: "David Porter" <aa3ur@home.com>
To: <sslyon@megalink.net>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [116909] Re: Visual Acuity> bifocals
Message-ID: <010e01c194d7\$da9baf00\$927ba8c0@jamison1.pa.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I can do you one better. I tried one of the vari-focal lenses but couldn't stand the lack of acuity off axis. Since I have severe astigmatism, this is very taxing for the vari-focal designs. However, after learning the knack of tilting up and down to focus, a change to trifocals was a piece of cake. I now have long distance glasses with a band set for arm's length (and computer screen) and a third band set for reading distance.

When it is time to play with surface mount devices, a flip-up reading glass magnifier that covers the entire two lenses works fine. If I really have to get serious, I also have a dual loupe that mounts on the temple of the glasses.

The only hard part about getting used to trifocals is getting used to the lines. It takes a few days. It is important to have the optometrist locate the position of the first magnification (arm's length) at a comfortable place. It should almost intrude on your normal, distant vision. That way, when you look at your hands, you are already using the correct lens.

It works for me, your mileage may vary.

David Porter AA3UR
aa3ur@home.com

----- Original Message -----

From: "ss lyon" <sslyon@megalink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, January 03, 2002 10:38 PM
Subject: Visual Acuity> bifocals

> After many years of stumbling, neck kinking, and pestering optometrists,
> I
> finally have a combo that works great for me. The first part was learning
> how to do an eye test by letting the clear image come to me rather than
> straining for it. The next part was to have my "reading" lenses ground for
> depth of field centered at arm's length so that I can see easily to read,
> the computer, my dashboard, negotiating stairs, etc. The depth of field at

> this greater length is much better than when they were cut for nominal 18"
> "reading" distance. They are also ground quite high on the lens (>50%) so
> that I don't have to kink my neck back when looking at close things at eye
> level. For close work (wiring, removing slivers...) I use the head band
> optics with selectable magnification, or, stack cheapo drug store
> magnifying glasses on my beak if I'm away. No more trifocals, or even more
> critical... the varilux, which make head positioning very tiring. Finally,
> the new "stylish" small glasses were too restrictive, so I went back to
> large glass "aviator" style for maximum peripheral freedom. I'm happy as a
> clam now.

> 73

> AA1MY

>

>

> Seabury & Sharon Lyon

> 99 Sparrowhawk Mtn Rd

> Bethel ME, 04217 U.S.A.

> 207-836-2576

>

> Virus Protection by Norton and ZoneAlarm

> ----- Original Message -----

> From: "Leon Heller" <leon_heller@hotmail.com>

> To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

> Sent: Thursday, January 03, 2002 9:06 PM

> Subject: Re: Fading Visual Acuity

>

>

> >

> >

> >

> > >From: "Lee Mairs" <lmairs@cox.rr.com>

> > >Reply-To: lmairs@cox.rr.com

> > >To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

> > >Subject: Fading Visual Acuity

> > >Date: Thu, 3 Jan 2002 18:51:58 -0500

> > >

> > >I went to my optometrist and had her make me up a set of bi-focals
where

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> > >bottom reading part was jut what was required for reading, but the
upper

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> have

> > >worked great, until this SMT stuff came along...

> >

> > At nearly 60, I have the same problem. I use an illuminated magnifier
that

> > clamps to the edge of the bench.

> >
> > 73, Leon
> > --
> > Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com
> > My web page: http://www.geocities.com/leon_heller
> > My low-cost Altera Flex design kit: <http://www.leonheller.com>
> >
> >
> > -----
> > Get your FREE download of MSN Explorer at
> > <http://explorer.msn.com/intl.asp>.
> >
>

Date: Thu, 3 Jan 2002 22:34:29 -0600
From: Todd Enders <enders@bolshoi.cc.misu.nodak.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [116910] Re: FOX: One down fast!
Message-ID: <200201040434.AA01750@bolshoi.cc.misu.nodak.edu>
Content-Type: text/plain
Mime-Version: 1.0 (NeXT Mail 4.2mach_patches v148.2)

Indeed, Larry was 599+ here at the outset, but by 0300 he wasn't all that strong as the band went long. Glad I got him in the first half hour! :-)

Had to wait for the spots to come out to find out where Fred had set up shop. Even then, all I could hear was pack, in amongst the bigtime QRM. There was a QSO between a couple QRO guys on the east coast going on right on top of where Fred was supposed to be, along with other assorted crud. Never did get a whiff of the Northern fox, even when things quieted down late in the hunt. Oh well, I'm happy to have Larry's pelt on the wall tonight! :-)

72/73,

Todd, AG0T

Date: Thu, 03 Jan 2002 22:50:48 -0600
From: "George, W5YR" <w5yr@att.net>
To: aa3ur@home.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [116911] Re: Visual Acuity> bifocals
Message-ID: <3C3534A8.F7BC68A2@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

What I have used for years for computer work is a pair of glasses which have the whole lens ground for my middle-vision trifocal correction and then have the usual bi-focal "spot" added near the bottom in the usual place.

That way, I don't have to tilt my head back to see the computer display through the tri-focal part of my usual glasses.

Sure save a lot of neckaches!

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe SOC 262 COG 8
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

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> I now have long distance glasses with a band set for arm's length (and
> computer screen) and a third band set for reading distance.

Date: Thu, 3 Jan 2002 20:55:00 -0800
From: "John Moriarity" <k6qq@hdo.net>
To: <msswmod@bigplanet.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [116912] Re: SWR, Theroy vs. Real World Conditions
Message-ID: <016201c194db\$f81ec7c0\$875fa13f@k6qq>

> But I **think** that the output of the matching network that is
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> at least! To design the "matching" circuit to go between the amp and
the
> antenna, don't you need to use both the impedance of the device at
it's output
> side and the impedance of the load you want to see connected to it?

Ron, Ron, Ron...

Don't you remember the article I wrote for the
QRP Quarterly when you were Editor?? ;-)

The matching network transforms the impedance
at the rig end of the feedline to whatever the
transmitter needs to see (usually 50 ohms) to
deliver its rated power.

As the article showed, the output impedance of the
device never enters into the design calculations.

There are, of course, special cases where this is not
true, but it generally is for ham radio purposes.

72,

John, K6QQ

Date: Thu, 03 Jan 2002 23:16:58 -0600
From: "George, W5YR" <w5yr@att.net>
To: k6qq@hdo.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116913] Re: SWR, Theroy vs. Real World Conditions
Message-ID: <3C353ACA.C77EE3D6@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

John Moriarity wrote:

> Ron, Ron, Ron...
>
> Don't you remember the article I wrote for the
> QRP Quarterly when you were Editor?? ;-)
>
> The matching network transforms the impedance
> at the rig end of the feedline to whatever the
> transmitter needs to see (usually 50 ohms) to
> deliver its rated power.
>
> As the article showed, the output impedance of the
> device never enters into the design calculations.

For which we can be truly grateful! <:}

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe SOC 262 COG 8
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All incoming and outgoing email virus-checked by Norton Anti-Virus 2002

Date: Thu, 3 Jan 2002 21:51:58 -0800
From: "blinn" <blinn@smgazette.com>
To: <mswmod@bigplanet.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [116914] Re: Workbench Top Recommendations?
Message-ID: <009001c194e3\$ee5ddb60\$6f69f040@blinn>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

http://members.tripod.com/Bill_Linn/Paddles.htm

-----Original Message-----

From: Ron KU7Y <mswmod@bigplanet.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Thursday, January 03, 2002 6:15 PM
Subject: Re: Workbench Top Recommendations?

>Hi All,

>

>No need for anything fancy in a work bench. I had 3 at work that were plywood.
>They must be well over 30 years old and still going strong.
>
>I don't worry about ESD very much. When working as a tech. in a 2 way radio shop I was taught to touch the chassis of the radio before touching the parts.
>I was told that this will give a path to discharge any static you have without causing any damage to the radio. While I'm sure this will bring on a few posts about how you have been getting "unseen" and "unknown" damage for years, I just don't worry about it. I'd rather replace a part, if I really ever hurt one, than spend all the time and money trying to avoid it.
>
>Important things for a work bench..... have it slope JUST A LITTLE BIT toward the back to keep small parts from rolling off onto the floor. Put in a LOT of outlets. Have most of them controlled by a switch close to the work bench to kill the power to everything you are working on and with.... things like the soldering iron, rig, power supply and etc. For those things like a frequency counter that you might want to leave the ocs heater on, have one or two 4plex's that are always on. Paint these something like red so you know they are always on.
>
>Keep a light plugged into one of the switched outlets and leave the switch on the light in the on position always. When the light is ON the projects are ON.
>Hard to forget and leave things on all night or day that way.
>
>Decide if you want to work sitting down or standing up. If it's sitting, will you use a stool or chair? I prefer standing at home. I had to sit at work. (I also had my reloading presses on the same work bench most of the time and that works best for me when standing). Install the bench at the right height for

>YOU.
>
>Then turn on the soldering iron, melt some nasty old lead solder, smell the
>fumes and go make some CW contacts. If the key starts slipping around the
>table, break out the super glue and..... well, you get the picture. :-)
>
>When I could find a good price, as in almost free, I liked using white
kitchen
>counter tops for work benches.
>
>How did I keep from loosing too many SMT parts? I only took out of the
holder
>the part I was ready to solder into place.
>
>Blessed is he who has a wife that can look at his workbench and not tell
him
>that it needs to be cleaned up! : -)
>
>OK, repeat after me.... KISS, KISS, KISS and FUN, FUN, FUN.
>
>Now it's back into my hole.....
>
>Ron, KU7Y
>ku7y@qsl.net
>Full Time RVing somewhere in the West
>Currently in Brenda, AZ.
>
>

--

Date: 3 Jan 2002 23:09:50 MST
From: "P.Ermisch" <ermisch@usa.net>
To: qrp-1@Lehigh.EDU
Subject: [116915] Re: [Re: Small Solar Panel?]
Message-ID: <20020104060950.7860.qmail@cpdvg202.cms.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

Ratshack sells the same 1.8W panel for \$29.99 if you're pinching pennies.=
=

#980-0561 at www.radioshack.com.

Or, maybe wire a couple of #980-0879 together at a slightly higher price =
and
lower amps/watts.

Chris Cartwright <ccart@phideaux.com> wrote:

> On Thu, 3 Jan 2002, Steve Lawrence wrote:

> =

> > I'm looking for a small solar panel, rated at something like 15v @100=
- =

> > 200ma. The end desire: charge a 12v battery pack in the 1 - 2 AH ra=
nge =

> =

> I've had good luck finding 12V "goodies" at <http://www.boatus.com> just =
ask

> the field day crew about the 12V coffee maker! BoatUS has a small 1.8W=

> panel (#220380) for \$32, and I have their 5W panel (#220381), been very=

> happy with it, and it's nearly indestructable. Much less fragile than =
my

> higher wattage glass panels.

> =

> -- Chris Cartwright, Unix Administrator | ccart@phideaux.com =
=

--

> -- N3XRV ARRL-VE Norcal Zombie #163 | Oxford, PA 19363 FM29as =
=

--

> -- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #92=
71

--

> =

Date: Thu, 3 Jan 2002 23:21:17 -0700
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-l@lehigh.edu

Subject: [116916] FOX: Corrected Results
Message-ID: <3C34E76D.12552.2C69B92@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

There was a fairly significant error in processing the logs for hunts 17-20.

The error has been corrected and the revised results have been posted to the web site at <http://www.CQC.org/fox> .

With best wishes for a happy and prosperous 2002...

Marshall Emm, N1FN
Milestone Technologies, Inc.,
Oak Hills Research & Morse Express
(303) 752-3382
<http://www.mtechnologies.com>

--

Date: Thu, 3 Jan 2002 20:19:04 -0600
From: "Mark Prather" <wb9hfk@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [116917] SKN 2002 report.
Message-ID: <000101c194d9\$3ffc54c0\$7a8a95ac@map>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

All,

I've just completed the tally on the SKN 2002 activities here. A total of 16 QSO's on 40M and 20M. I had a blast, and plan to do it again next time. I'd encourage all that participated to send in the info to the ARRL!

73,

Mark

Mark A. Prather - WB9HFK
QRP ARCI # 9472 --- QRP-L # 1159
NORCAL --- ARRL
Champaign-Urbana Astronomical Society

Date: Thu, 3 Jan 2002 22:12:54 -0800
From: "blinn" <blinn@smgazette.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [116918] Re: Workbench Top Recommendations?
Message-ID: <009701c194e6\$d9d83a20\$6f69f040@blinn>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Sorry guys and gals, I was trying to post an address to a couple of pictures of my workbench. Wondered where that email went! Maybe I'll get Tripod figured out or find a simpler spot to store pictures for this sort of thing.

Bill

>http://members.tripod.com/Bill_Linn/Paddles.htm

>-----Original Message-----

>From: Ron KU7Y <mswmod@bigplanet.com>

>To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

>Date: Thursday, January 03, 2002 6:15 PM

>Subject: Re: Workbench Top Recommendations?

>

>

>>Hi All,

>>

>>No need for anything fancy in a work bench. I had 3 at work that were
>plywood.

>>They must be well over 30 years old and still going strong.

>>

>>I don't worry about ESD very much. When working as a tech. in a 2 way
>radio

>>shop I was taught to touch the chassis of the radio before touching the
>parts.

>>I was told that this will give a path to discharge any static you have
>without

>>causing any damage to the radio. While I'm sure this will bring on a few
>posts

>>about how you have been getting "unseen" and "unknown" damage for years, I
>just
>>don't worry about it. I'd rather replace a part, if I really ever hurt
>one,
>>than spend all the time and money trying to avoid it.
>>
>>Important things for a work bench..... have it slope JUST A LITTLE BIT
>toward
>>the back to keep small parts from rolling off onto the floor. Put in a
>LOT
>of
>>outlets. Have most of them controlled by a switch close to the work bench
>to
>>kill the power to everything you are working on and with.... things like
>the
>>soldering iron, rig, power supply and etc. For those things like a
>frequency
>>counter that you might want to leave the ocs heater on, have one or two
>4plex's
>>that are always on. Paint these something like red so you know they are
>always
>>on.
>>
>>Keep a light plugged into one of the switched outlets and leave the switch
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>>the light in the on position always. When the light is ON the projects
>are
>ON.
>>Hard to forget and leave things on all night or day that way.
>>
>>Decide if you want to work sitting down or standing up. If it's sitting,
>will
>>you use a stool or chair? I prefer standing at home. I had to sit at
>work. (I
>>also had my reloading presses on the same work bench most of the time and
>that
>>works best for me when standing). Install the bench at the right height
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>>YOU.
>>
>>Then turn on the soldering iron, melt some nasty old lead solder, smell
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>>fumes and go make some CW contacts. If the key starts slipping around the
>>table, break out the super glue and..... well, you get the picture. :-)
>>
>>When I could find a good price, as in almost free, I liked using white
>kitchen
>>counter tops for work benches.

>>
>>How did I keep from loosing too many SMT parts? I only took out of the
>holder
>>the part I was ready to solder into place.
>>
>>Blessed is he who has a wife that can look at his workbench and not tell
>him
>>that it needs to be cleaned up! : -)
>>
>>OK, repeat after me.... KISS, KISS, KISS and FUN, FUN, FUN.
>>
>>Now it's back into my hole.....
>>
>>Ron, KU7Y
>>ku7y@qsl.net
>>Full Time RVing somewhere in the West
>>Currently in Brenda, AZ.
>>
>>
>
>
>--
>
>

--

Date: Thu, 3 Jan 2002 20:35:29 -0500 (EST)
From: <n2go@arrl.net>
To: <qrp-1@Lehigh.EDU>
Subject: [116919] OT Linux invasion woes
Message-ID: <Pine.LNX.4.33.0201032015070.1102-100000@valhalla.v>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Apparently during the wee hours of the first of the year the hackers were working away.

I first noted a problem when I tried to print some pdf files. Linux gave a message : jobs cued but line print daemon cannot start daemon.

I took everthing off the DSL line and started snooping. It seems that someone had sneaked in and installed a root kit then affected the secure

shell daemon. They then tried to cover their tracks by modifying the netstat and closed down the printer daemon so no one else could follow in. They did leave some footprints.....I found some ip addresses 193.231.139.0 which is a Romanian High School and another 193.254.340 which came back as FinInvest whatever that institution is.. There were a couple others which I haven't identified and a Yahoo account nebunici_cta@yahoo.com

After some hours this evening Slackware 8.0 was installed and all the entry points have been sealed. (hopefully)

Why would someone install a root kit and then cover(or at least try to cover :) their tracks? Most likely to have a back door to visit again. Maybe to use my computer and probably others to wreak havoc on someone or some site ping the daylights out of them.

I was just reading with interest a thread on firewalls.... It seems that there are people out there in computerland with time on their hands :))

Bottom line...if you have DSL, be sure you have a firewall and make sure it works. Remove all cookies and use tough passwords with numbers and upper and lower case letters.

I lost some email when I was setting fetchmail up again. If anyone sent direct mail and got it bounced...that is why.

73,

Jim n2go

Date: Fri, 4 Jan 2002 00:50:36 -0800
From: "Huston" <hgruen@pacifier.com>
To: <qrp-l@lehigh.EDU>
Subject: [116920] ARRL Radio Designer
Message-ID: <001401c194fc\$e2123cc0\$49012b42@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Does anyone know where I could obtain a copy of the ARRL Radio Designer software? They no longer sell it. Thanks.

Huston K7ITA

Date: Fri, 4 Jan 2002 10:18:53 -0000
From: "k8cv" <k8cv@netzero.net>
To: "Qrp-L Posts" <qrp-l@lehigh.edu>
Subject: [116921] Fw: One down fast!
Message-ID: <001901c19509\$36ba2e20\$eae45aa6@waltamos>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

You don't think DOC is getting special consideration since he is the fox coordinator do you ?

Hummmmmmmmmmm

Maybe so, does seem he is always first?

Collusion?

Foxing around, me thinks!

Hey, someone has to be first, why not me? Whatever works, right. :-)

Do real hunters PHONE AHEAD? Make your fox reservations NOW

.....

Walt Amos K8CV Royal Oak, MI.

----- Original Message -----

From: "Trevor Jacobs" <fxtech@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, January 04, 2002 03:06
Subject: Re: One down fast!

> This is a first, The first time I sent my call Larry came right back
> with it!!! Thanks for the Pelt Larry, Great signal into Burbank tonight.

>

> Best 72/73's

> Trev

> KG6CYN

> ----- Original Message -----

> From: Karl F. Larsen <k5di@zianet.com>
> To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
> Sent: Thursday, January 03, 2002 6:18 PM
> Subject: FOX: One down fast!
>
>
> >
> > Boy with Larry N2WW being near home in CO I put on my cloud warmer
> > antenna (80 meter center fed dipole) and worked him right after Doc
> K0EVZ
> > who was first again! It's a setup I'm sure. Larry worked him simplex
> and
> > THEN did cq fox u, and I got him 1.5 KHz higher. So half done.
> >
> > I think with ESP signal strength that VE3FAL is on 7040 and I do
> > hear a tu and snatches of words but at low signal strength even on the
> > killer vertical.
> >
> > --
> > Yours Truly,
> >
> > - Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
> > <http://www.zianet.com/k5di/>
> >
> >
>
>

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Date: Fri, 04 Jan 2002 06:41:38 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: tracy@bytemark.com
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [116922] Re: workbenches
Message-ID: <3C3594F2.312CAC90@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tracy,

Yes but... the usual kitchen counter top is covered with Formica. It is bad where static is concerned. I agree they make nice looking benches. I have used one myself, but I also took anti-static protection there!

73

Date: Fri, 04 Jan 2002 06:44:24 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: tmyers@AcademicPlanet.com
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [116923] Re: Need source (cheap)
Message-ID: <3C359598.EACB17E0@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Try Fair Radio Sales or some of the other surplus dealers.

73

Date: Fri, 04 Jan 2002 12:31:41 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: hgruen@pacifier.com, qrp-1@Lehigh.EDU
Subject: [116924] Re: ARRL Radio Designer
Message-ID: <F1611QlHBlrcIXlv0gx00016820@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: "Huston" <hgruen@pacifier.com>
>Reply-To: hgruen@pacifier.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: ARRL Radio Designer
>Date: Fri, 4 Jan 2002 00:50:36 -0800
>
>Does anyone know where I could obtain a copy of the ARRL Radio Designer
>software? They no longer sell it. Thanks.
>
>Huston K7ITA
>

Try a web search for Ansoft and Serenade. Radio Designer was in fact the latter. It's free, but I can't download it because you have to use their downloader and they don't allow downloads to be resumed.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

MSN Photos is the easiest way to share and print your photos:
<http://photos.msn.com/support/worldwide.aspx>

Date: Fri, 04 Jan 2002 08:45:01 -0400
From: Dave Marling <dbm@klis.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [116925] Re: 70.7 volt line-to-voice-coil transformer. What is it?
Message-ID: <5.1.0.14.0.20020104084248.03522880@mail>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

These transformers are in common use in public address systems. A pair of wires from the 70.7V output of the amplifier can be run or tapped anywhere without worrying about speaker load balancing.

Usually the transformer is mounted on the speaker frame and allows the audio output to be set to the speaker (settings usually rated in watts - .25w, .5w, 1w, up to 10w with some).

The next time you're in the middle of WAL-MART and you catch a bit of that great music, look up at the ceiling, locate the speaker grill and you'll know there's a 70.7V system in use.

Dave

VE1VQ

Not responsible for the "great music" in any of these places.

Date: Fri, 4 Jan 2002 08:19:21 EST
From: ARDUJENSKI@aol.com

To: qrp-1@lehigh.edu
Subject: [116926] OT: January Spartan Sprint
Message-ID: <183.1b85891.296705d9@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I notice they are going to count double contacts on 80m for the January SP. I was planning to be working the 3686 area considering most rigs like PIXIE's which are rockbound are on this freq. Also I believe this is still the official QRP frequency. Please correct me if I am wrong on the frequencies

Alan KB7MBI in Woodinville, WA
FISTS 5702 Proud member of ARRL

Date: Fri, 4 Jan 2002 08:22:01 -0500
From: Nils R Young <nilsbull@juno.com>
To: QRP-L@lehigh.edu
Subject: [116927] Collecting parts & other PA stories
Message-ID: <20020104.082207.1224.0.nilsbull@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,

I've been collecting parts for the mini radio projects (40-9er & W7BBX's '70s vintage QRP box). Some of 'em came from RS.com yesterday.

NE576N (low power compandor): This one I gotta get some more info on. Looks like a minimal parts deal for cell phones &c. Might be interesting in simple-minded QRP rigs for the simple-minded like me.

TEA5710N (AM/FM receiver on a chip): Very interesting doodad. I read up on this series of mini-receiver chips a while back & one of the application notes actually had info for a SSB transceiver usin' the chips. I ordered two, just in case I don't blow the first one up making a receiver. Who knows? I might have another box full of no-longer-available parts.

Then there's the rebuild of the 140 W PA project, which yesterday got me out in the garage slicin' & dicin'. I found some double-thickness double-sided PCB material that would almost work as top & bottom panels, were it not for the fact that, at double-sided strength, the stuff's too thick to slide in the slots on the end pieces. Works great in the shield spots though.

The top & bottom of the PA are now two pieces of nominal 1/16" thick pieces of aluminum plate from the local Lowe's. It's the kind that has the little Xs on it like all the deck plating I used to walk around on back when. Kinda gives the box a certain Capt. Roger U. Roundly & His Space Cadets feel. I think I'll try to paint 'em black (or die 'em that color with ferric chloride wash).

Which brings up another question: I'm lookin' for some sort of aluminum primer/seal coat that I can use to get the whole box eventually painted black. I can use ferric chloride ("And he said 'Why not? I done it in reform school.'") but I'm thinking that real paint might look, you know, swayver.

73

Nils

Nils R. Bull Young -- El Gringo Errante -- La Estancia de los Guajolotes
Sonrientes

W8IJN -- <http://www.geocities.com/nilsbull/w8ijn>

In my day you had to FIGHT to have digits! Every DAY was a STRUGGLE!

--- Comrade Nikolai Sergeevich McTovarishov

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<http://dl.www.juno.com/get/web/>.

Date: Fri, 4 Jan 2002 06:29:24 -0700

From: "Rod N0RC" <rod@n0rc.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>,
<hgruen@pacifier.com>

Subject: [116928] Re: ARRL Radio Designer

Message-ID: <000b01c19523\$d406e460\$6401a8c0@greyrock>

MIME-Version: 1.0

Content-Type: text/plain;
charset="Windows-1252"

Content-Transfer-Encoding: 7bit

-----Original Message-----

Subject: ARRL Radio Designer

From: Huston (

-----Original Message-----

Subject: ARRL Radio Designer

From: Huston (hgruen@pacifier.com)
Date: Fri Jan 04 2002 - 03:50:36 EST

> Does anyone know where I could obtain a copy of the ARRL Radio
Designer
> software? They no longer sell it. Thanks.
>
> Huston K7ITA

>From ARRL, <http://www.arrl.org/ard/>

ARRL Radio Designer was published by ARRL beginning in late 1994. It was discontinued in August 2000 and is no longer available.

A subset of the industry-standard linear circuit-analysis program Super-Compact from Compact Software, ARRL Radio Designer is a Windows(TM)-based computer program that simulates and analyzes the performance of passive and small-signal-ac radio and electronic circuitry.

Since ARRL Radio Designer was first published, Compact Software has been acquired by Ansoft Corporation, and Super-Compact has been replaced by Serenade, an integrated software suite for RF and microwave design. Ansoft Corp. offers a student version called Serenade SV for personal, noncommercial use. Serenade SV offers many of the features of ARRL Radio Designer (and more) in a more modern software package. You can find out more about Serenade SV and download a free copy from Ansoft's Serenade [<http://www.ansoft.com/products/hf/serenade/index.cfm>] page. ARRL is not affiliated with Ansoft Corp. We provide this information as a service for ARRL members who are interested in circuit modeling software, but cannot offer support for Serenade SV.

)

Date: Fri Jan 04 2002 - 03:50:36 EST

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ARRL Radio Designer was published by ARRL beginning in late 1994. It was discontinued in August 2000 and is no longer available.

A subset of the industry-standard linear circuit-analysis program Super-Compact from Compact Software, ARRL Radio Designer is a Windows(TM)-based computer program that simulates and analyzes the performance of passive and small-signal-ac radio and electronic circuitry.

Since ARRL Radio Designer was first published, Compact Software has been acquired by Ansoft Corporation, and Super-Compact has been replaced by Serenade, an integrated software suite for RF and microwave design. Ansoft Corp. offers a student version called Serenade SV for personal, noncommercial use. Serenade SV offers many of the features of ARRL Radio Designer (and more) in a more modern software package. You can find out more about Serenade SV and download a free copy from Ansoft's Serenade [<http://www.ansoft.com/products/hf/serenade/index.cfm>] page. ARRL is not affiliated with Ansoft Corp. We provide this information as a service for ARRL members who are interested in circuit modeling software, but cannot offer support for Serenade SV.

Date: Fri, 4 Jan 2002 06:51:08 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-1@lehigh.edu>
Subject: [116929] VE3FAL alludes me
Message-ID: <Pine.LNX.4.33.0201040648190.2063-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I must have tuned over Fred 30 times. I just could not copy him in New Mexico. Things must have been slow because I never heard a pack on, or near Fred's frequency.

Since I finished with Larry at 0202 UTC I spent 2 hours looking for Fred....

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Fri, 4 Jan 2002 07:00:12 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <n2go@arrl.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [116930] Re: OT Linux invasion woes
Message-ID: <Pine.LNX.4.33.0201040654130.2063-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Jim, I'm using Red Hat version 7.2 linux and when I installed it the loader asked me what level of fire wall to install. Since this computer is at home and I never want to visit it from afar, I set it to maximum fire wall. I then experimented and no-one, even root, cannot get on my linux via the internet.

This is 100% protection from what your experiencing. By the way it's a person from that High School that's doing it to you. The kid is using Linux....

On Thu, 3 Jan 2002 n2go@arrl.net wrote:

>
> Apparently during the wee hours of the first of the year the hackers were
> working away.
>
> I first noted a problem when I tried to print some pdf files. Linux gave
> a message : jobs cued but line print daemon cannot start daemon.
>
> I took everything off the DSL line and started snooping. It seems that
> someone had sneaked in and installed a root kit then affected the secure

--
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Fri, 04 Jan 2002 08:48:13 -0500
From: Ken Newman <N2CQ@dandy.net>
To: epaqrp-l@Lehigh.EDU, QRP-L@Lehigh.EDU, njqrp@njqrp.org,
n9avg@amsat.org
Subject: [116931] [CONTEST] QRP Contest Calendar - Jan 2002
Message-ID: <3.0.6.32.20020104084813.00943d30@mail.dandy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

QRP CALENDAR

JANUARY 2002

40 METER FOXHUNTS

Fox Hunt - Thursdays - 9pm EST, 8PM CST, 7PM MST and 6PM PST.

Info: <http://www.cqc.org/fox>

Cub Fox Hunt - Tuesdays - 9pm EST, 8PM CST, 7PM MST and 6PM PST.

Info: <http://www.zianet.com/k5di/fox/>

Truffle Hunt - Tue & Thur - 30 min before Fox Hunt

Info: http://fpqrp.com/pig_hunt.html

ARRL Straight Key Night (CW)

Jan 1 - 0000z to 2400z

Info: <http://www.arrl.org/contests/announcements/skn.html>

"Brass Pounders Renewal"

Rock Around the Clock (CW) *** QRP Contest ***

Jan 1 0000-2400 UTC

Rules: <http://www.wfu.edu/~hoglund/Roc.htm>

"Fun With Xtal Rigs"

~~~~~  
AGB NYSB - "New Year SnowBall" Contest (80M SSB/CW) ...QRP Category

Jan 1 - 0000z to 0100z

Rules: [http://www.qsl.net/eu1eu/agb\\_nysb.htm](http://www.qsl.net/eu1eu/agb_nysb.htm)

"Activity Group of Belarus Snow Ball Fight"

~~~~~  
SARTG Happy New Year Contest (80/40M RTTY)

Jan 1 - 0800z to 1100z

Rules: <http://www.sk3bg.se/contest/sartgnyc.htm>

"You send Happy New Year in your native language"

~~~~~  
AGCW Happy New Year Contest (CW)...QRP Category

Jan 1 - 0900z to 1200z

Rules: <http://www.agcw.de/>

"Activity Group in Germany Nuen Jahr"

~~~~~  
AGCW-DL QRP Winter Contest (CW) ... QRP Contest!

Jan 5 - 1500z to Jan 6 - 1500z

Rules: <http://www.agcw.de/>

"Activity Group of Germany. Anyone can play"

~~~~~  
ARRL RTTY Roundup

Jan 5 - 1800z to Jan 6 - 2400z

Rules: <http://www.arrl.org/contests/announcements/rtty.html>

"QRPers: Don't plan a CW ragchewfest on 7040 or 14060 this weekend"

~~~~~

Kid's Day

Jan 5 - 1800z to 2400z

Info: <http://www.arrl.org/FandES/ead/kd-rules.html>

"Train the kids on ham radio and have fun too"

~~~~~

Adventure Radio Society - Spartan Sprint (CW) ... QRP Contest!

Jan 8 - 0200z to 0400z (Monday Evening US/Canada)

Rules: [http://www.natworld.com/ars/pages/spartan\\_sprints/ss\\_rules.html](http://www.natworld.com/ars/pages/spartan_sprints/ss_rules.html)

"Test those portable new toys"

~~~~~

Japan International DX Contest (CW) (1.9/3.5/7 Mhz)

Jan 11 - 2200z to Jan 13 - 2200z

Rules: <http://www.jzap.com/je1cka/jidx/jidxrule-e.html>

"Prefecture Hunter's Dream"

~~~~~

North American QSO Party (CW)

Jan 12 - 1800z to Jan 13 - 0600z

Rules: <http://www.ncjweb.com/naqprules.html>

"Beginner's Favorite"

~~~~~

Power Management Contest (CW) ...QRP Recommended

Jan 12 - 1800z to Jan 13 - 0600z

Rules: <http://www.qsl.net/wd3p/qrp/pwrcontest/pwrcontest.htm>

"NAQP Piggyback to see how long your battery runs down"

DARC 10-Meter Contest (CW/SSB)

Jan 13 - 0900Z - 1059Z

Rules: <http://www.darc.de/referate/dx/xedczr.htm>

"Work anyone"

070 Club PSK Contest ... QRP Category

Jan 19 - 0000z to 2400z

Rules: <http://www.arrl.org/contests/months/jan.html>

"QRP PSK on the air"

Michigan QRP Club Contest (CW) ... QRP Contest!

Jan 19 - 1200z to Jan 20 - 2359z

Rules: <http://www.qsl.net/miqrpclub>

"Excellent QRP-ARCI Contest Training Session"

LZ OPEN CONTEST 2001 (CW 80M/40M) ...QRP Category

Jan 19 - 1200z to 2000z

Rules: <http://www.qsl.net/lz1fw/lzopen/>

"Work anyone. 6 digit exchange. (QSO# sent + QSO# rcvd from last QSO)"

North American QSO Party (SSB)

Jan 19 - 1800z to Jan 20 - 0600z

Rules: <http://www.ncjweb.com/naqprules.html>

"Beginner's Favorite #2"

~~~~~

CQ WW 160-Meter DX Contest (CW) ... QRP Category

Jan 25 - 2200z to Jan 27 - 1600z

Rules: <http://www.cq-amateur-radio.com/cq160rules.html>

"QRP is a real test 160 meters. Try it."

~~~~~

REF French Contest (CW)

Jan 26 - 0600z to Jan 27 - 1800z

Rules: <http://www.arrl.org/contests/months/jan.html>

"Some rare French DX may operate here"

~~~~~

BARTG Sprint Contest (Digital)

Jan 26 1200z to Jan 27 1200z

Rules: <http://www.bartg.demon.co.uk/>

"More RTTY this month"

~~~~~

UBA DX Contest (Belgian) (SSB) ... QRP Category

Jan 26 - 1300z to Jan 27 1300z

Rules: <http://www.uba.be/HF/conrules/UBArulesfor.htm>

"Very good QRP entry. Work anyone"

~~~~~  
Kansas QSO Party (All)(HF/VHF)

Date Jan 26 - 1800z to Jan 27 - 1800z

Rules: <http://www.ksarrrl.net/qso/2002ksqso.htm>

"Non-QRP but you can win anyway."

~~~~~

Thanks to WA7BNM, K3WWP, SM3CER, ARRL and others
for assistance in compiling this calendar.

Anyone may use this "QRP Contest Calendar" for your website, newsletter,
e-mail list or other media as you choose.
(Include a credit to the source of this material of course.)

72 de	**** QRP Contest Calendar ****
Ken Newman - N2CQ	http://www.njqrp.org/data/contesting.html
N2CQ@ARRL.NET	http://www.n3epa.org/Pages/Contest/contest.htm
	http://www.qsl.net/cqrp/contests.html

Date: Fri, 4 Jan 2002 09:10:38 -0500
From: W2AGN <w2agn@pobox.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [116932] Re: Visual Acuity> bifocals
Message-ID: <02010409103804.02177@CC2289974-A>
Content-Type: text/plain;
charset="iso-8859-1"
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

This is very interesting, although I am sure someone will complain about it
being "OT."

I have used the Varilux lenses for years. I am VERY nearsighted (since I was
6), Around 20/350. I wore contacts for years, but when I got older, needed
reading glasses, so just said the heck with it, and went to bifocals. Almost
broke my neck! I really like the Varilux, since it seems easy to go from
reading, to computer screen, etc. For REAL close work, I just take my glasses
off. I am so nearsighted it is almost like using a magnifier. Still, SMD is
taxing to say the least.

The regular bifocals/trifocals would be a problem, since there is such a wide difference between my distance vision, and my close vision.

--

John L Sielke W2AGN
w2agn@pobox.com
<http://www.qsl.net/w2agn>
Trustee: W3IYQ

Date: Fri, 4 Jan 2002 08:16:41 -0600
From: Boliver Allmon <Boliver.Allmon@HALLIBURTON.com>
To: "'Qrp-L (E-mail)" <qrp-l@Lehigh.EDU>
Subject: [116933] RE: First Kit Suggestions?
Message-ID: <6436BBDD2887D411A2360000E866FEEE01F9CB20@HOUEXCH045>
MIME-Version: 1.0
Content-Type: text/plain

Several have suggested the program outlined
on this web page.

> <http://www.qsl.net/westfla/kits/>
>
> Does anyone know that the addresses for
the kits are still good? This looks like a good
plan to learn by.

Date: Fri, 4 Jan 2002 09:18:13 -0500
From: "Lau, Zack, W1VT" <zlau@arrl.org>
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>
Subject: [116934] Re: ARRL Radio Designer
Message-ID: <125490A005E3D3118C9C00805FC743CC027E3148@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

N7WS said he got a CD for Serende SV from Ansoft.

Date: Fri, 4 Jan 2002 08:21:35 -0600
From: Boliver Allmon <Boliver.Allmon@HALLIBURTON.com>

To: "'ss lyon'" <sslyon@megalink.net>
Cc: "'Qrp-L (E-mail)" <qrp-l@Lehigh.EDU>
Subject: [116935] RE: First Kit Suggestions?
Message-ID: <6436BBDD2887D411A2360000E866FEEE01F9CB21@HOUEXCH045>
MIME-Version: 1.0
Content-Type: text/plain

>I'd recommend getting in on the "Elmer" project (just started)
with the SW
>series rigs by Small Wonder Labs.

More than one person made this suggestion, can you tell me more
about it
and where I can access the details?

Date: Fri, 04 Jan 2002 07:41:17 -0700
From: "Steve Galchutt" <n0tu@hotmail.com>
To: QRP-L@lehigh.edu
Subject: [116936] Feedline freedom
Message-ID: <F225NbBVeNb4RX3PFhB00018a48@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Some folks asked for the links on where I found the info for my version this
20m LC halfwave ATU. (Search on "halfwave antenna" may bring up more? But
these will get you the basics)

<http://www.njqrp.org/n2cxantennas/halfer/>
<http://www.geocities.com/aa5tb/coupler.html>
http://www.g3vgr.co.uk/hw_ant.htm

Some folks wanted to dispute the old counterpoise issue - No Tks!

Theory aside, I can only say what has been my experience. Same thing with
the peaking for max RX noise or signal is also where the lowest VSWR
happens. Again this happens to be the case from my individual experience
with this tuner.

I field tested this little tuner in last week's Holiday Mw 'test, worked
both coasts on 20m @ 250Mw w/33' of #22 wire slung in a tree and virually no
counterpoise. Go figure? Your mileage may vary. But remember be sure to have
FUN!

Picture of tunner field ready:

<http://www.qsl.net/n0tu/images/wireTUNER.JPG>
Inside w/cover removed:
<http://www.qsl.net/n0tu/images/wireTUNERcu.JPG>

HNY, Steve/n0tu

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>.

Date: Fri, 4 Jan 2002 09:28:46 -0500
From: "Scott E. Olitsky" <solitsky@acsu.buffalo.edu>
To: <w2agn@pobox.com>,
 "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [116937] Re: Visual Acuity> bifocals
Message-ID: <015601c1952c\$25905480\$0201a8c0@hppav>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

A few thoughts to those of you using near reading aids (I am not quite there yet - a couple more years to go).

Make sure to tell you eye doctor where you like to have clear vision. In general, we are taught to give people clear "reading" vision at 13", this may be good for the "average" person but does not help the 6'6" person with very long arms who may read at 22" or the person who wants clear vision for a computer screen 20" away. Many times, eye doctors do not think to ask about this and what looks good in the office will stink at home.

The optician can put the reading segment almost anywhere you want, carpenters and electricians often like it in the top half of the lens.

Two limitations to bifocal/trifocals....the closer you make the "clear" point of your near vision, the less depth of field you will have....objects that were clear further away will no longer be. Second, as you lose your ability to focus (i.e. as you age) it will not be possible to give you clear vision everywhere with a trifocal, there will be "gaps" between the different segments that can not be made clear. The only way around this is the progressive bifocal (Varilux) which has some limitations as anyone who has tried it will experience in the beginning.

Scott
AC3A

----- Original Message -----

From: "W2AGN" <w2agn@pobox.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Friday, January 04, 2002 9:10 AM
Subject: Re: Visual Acuity> bifocals

> This is very interesting, although I am sure someone will complain about
it
> being "OT."
>
> I have used the Varilux lenses for years. I am VERY nearsighted (since I
was
> 6), Around 20/350. I wore contacts for years, but when I got older, needed
> reading glasses, so just said the heck with it, and went to bifocals.
Almost
> broke my neck! I really like the Varilux, since it seems easy to go from
> reading, to computer screen, etc. For REAL close work, I just take my
glasses
> off. I am so nearsighted it is almost like using a magnifier. Still, SMD
is
> taxing to say the least.
>
> The regular bifocals/trifocals would be a problem, since there is such a
wide
> difference between my distance vision, and my close vision.
>
> --
> -----
> John L Sielke W2AGN
> w2agn@pobox.com
> <http://www.qsl.net/w2agn>
> Trustee: W3IYQ
>

Date: 04 Jan 2002 04:55:42 -0500
From: Caitlyn Martin <ku4qd@qsl.net>
To: qrp-1@lehigh.edu
Subject: [116938] Re: OT Linux invasion woes
Message-ID: <1010138149.2197.5.camel@localhost.localdomain>
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
Mime-Version: 1.0

Hi, Karl, and everyone else,
>

> Hi Jim, I'm using Red Hat version 7.2 linux and when I installed it
> the loader asked me what level of fire wall to install. Since this
> computer is at home and I never want to visit it from afar, I set it
> to maximum firewall. I then experimented and no-one, even root,
> cannot get on my linux via the internet.

That is only true if there is no vulnerability in iptables or ipchains
(whichever firewall you are using of the two provided). In the case of
an unpatched copy of Red Hat Linux 7.2 there is such a vulnerability in
iptables. The key is to insure that everything is up to date in terms
of patches and updates (what Red Hat calls Errata) to insure that your
firewall is locked down tight.

If you used the default firewall in 7.2 and/or if you used Lokkit, you
are using ipchains, BTW.

72/73,
Caity
KU4QD

Date: Fri, 04 Jan 2002 16:32:38 +0100
From: "Ingo, DK3RED" <dk3red@t-online.de>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [116939] Re: Collecting parts & other PA stories
Message-ID: <3C35CB16.D3756402@t-online.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hola Nils,

> ... I'm lookin' for some sort of aluminum
> primer/seal coat that I can use to get the whole box eventually painted
> black. ...

The cabinet of the Norcal 40A transceivers is silkscreend and painted. I
use this transceiver many years without any signs of use. Exelent stuff!
Ask Wayne Burdick (Wilderness Radio) for details about the used paint.

--

72/73 de Ingo, DK3RED (Don't forget: the fun is the power !)
dk3red@t-online.de - www.qsl.net/dk3red - www.t-online.de/~dk3red

Date: Fri, 4 Jan 2002 10:55:40 -0500
From: "Kwik, Ed " <ed.kwik@delphiauto.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116940] RE: Workbench Top Recommendations?
Message-ID:
<9F176F70FD71AC48AFC36F879D2B84E3016CFF18@tryexch01.NorthAmerica.DelphiAuto.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

At Hughes Aircraft we had special conductive floor tiles. Never forget
stopping production one Monday to remove the floor wax the janitorial staff
put down over one weekend.

Ed AB8DF

-----Original Message-----
From: w2wurjj [mailto:w2wurjj@verizon.net]
Sent: Thursday, January 03, 2002 3:38 PM
To: Low Power Amateur Radio Discussion
Subject: Re: Workbench Top Recommendations?

IBM (defense division) used floor mats & wrist bracelets grounded to metal
tables. They may have had special floor tile, but that wasn't my
responsibility. The elite had anti static benchtops, but they didn't cover
the entire bench.

Date: Fri, 4 Jan 2002 10:59:51 -0500
From: "Mike Yetzko" <myetzko@insydesw.com>
To: <Boliver.Allmon@HALLIBURTON.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [116941] Re: First Kit Suggestions?
Message-ID: <00e401c19538\$d98a20e0\$0600a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

You know, you don't HAVE to start with a radio kit. Especially if you're
that much of a neophyte. Consider things like meter kits, or 'toy' kits,
that
are simple but let you hone the same skills you'll use later building a
radio.

You don't want to learn on a K2. Sure, your skills may be fine by the time you finish the kit, but about those early parts you mounted...

It's always a good idea to have small simple self-contained kits to develop the skills. Kits that are CHEAP, just in case, and SMALL, so you can work to completion and know if you're successful or not without the risk of a big complex kit.

With that in mind, look at Ramsey, or the kits offered via the mailorder stuff from Radio Shack. Build them to get the confidence, THEN tackle something complex.

Mike

Date: Fri, 4 Jan 2002 10:57:37 -0500
From: "Rex Harper" <w1rex@megalink.net>
To: <qrp-1@lehigh.edu>
Subject: [116942] OT: FWIW....Bifocals & reading glasses
Message-ID: <001101c19538\$888c7c60\$0200a8c0@rex>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gangue of bespectacled QRPers,

I spend about 50 percent of my day designing and programming microprocessor systems in front of a computer screen and another 50 percent behind a soldering iron. Having made the transition to bifocals about 10 years ago, I learned long ago that bifocals and computer screens do not coexist peacefully. I measured the desktop and had the optometrist cut a full lens pair of "prescription" computer glasses set for my computer setup. Many businesses will pay for them under a medical plan if you are required to use a computer for extended times. I also prefer to use full lens reading glasses as I am a serious reader. I noticed that as my eyeballs elongate?...from aging...my old reading glasses became perfect computer glasses. My optometrist has all the data on each pair and checks them for me when I have my eye exam. He can tell me the new DTC, "distance to computer" for each set. Now I use my old reading glasses as new computer glasses and adjust the screen distance accordingly. The Lions Club has to wait quite a bit longer to get a hold of my outdated glasses.

W1REX Rex Harper

Date: Fri, 4 Jan 2002 10:21:02 -0600
From: Boliver Allmon <Boliver.Allmon@HALLIBURTON.com>
To: "'Mike Standbridge'" <ve7mst@goldcity.net>
Cc: "'Qrp-L (E-mail)" <qrp-l@Lehigh.EDU>
Subject: [116943] RE: First Kit Suggestions?
Message-ID: <6436BBDD2887D411A2360000E866FEEE01F9CB2C@HOUEXCH045>
MIME-Version: 1.0
Content-Type: text/plain

If anyone has this information please forward it to me?

> If you are considering small, affordable kits that you can build
something
> you WILL use in your shack....why not one of the kits available on
this
> list....AZ ScQRPions "Stinger Singer" morse code frequency
counter...or the
> Rainbow tuner kit. Sorry I don't have the URLs at hand but I am
sure someone
> does.
>72 de VE7MST
> Mike

> >

Date: Fri, 04 Jan 2002 16:23:31
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: nkennedy@tcainternet.com
Cc: qrp-l@lehigh.edu
Subject: [116944] RE: Workbench Top Recommendations?
Message-ID: <F225aImPiZx0ASWTgZu00017eb6@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>Here's a safety tip for ya--when working with DIP chips--don't go walking
>around the work area barefoot!! Voice of experience! Ever had 14 little
>vampire bites spaced in two 0.1 inch lines on the sole of your foot?

>72--Nick, WA5BDU

Yeah, and watch out for anything else that you happen to clip off and let fall into the carpet jungle. I drove a clipped off Molex pin into my palm once as I braced myself to sit down on the floor (I was most likely barefoot too but that is beside the point). It was a lot longer (and sturdier!) than a DIP pin and went in nearly all the way.

Brad KG6IOE

Send and receive Hotmail on your mobile device: <http://mobile.msn.com>

Date: Fri, 04 Jan 2002 16:27:20
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: qrp-1@lehigh.edu
Subject: [116945] Collins Mechanical Filters
Message-ID: <F106o8yfogkJXrRjbDt00017eaa@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

I found a few assemblies manufactured by Rockwell International that contain each a brace of #526-9700-010 Collins Mechanical Filters. One search engine hit declares these to be 256 kHz center frequency, 3.6 kHz bandwidth units. Can anyone confirm or have data sheet?

Brad KG6IOE

Chat with friends online, try MSN Messenger: <http://messenger.msn.com>

Date: Fri, 4 Jan 2002 10:32:54 -0600
From: "Patrick Cummins" <pcummins@misnet.com>
To: <qrp-1@Lehigh.EDU>
Subject: [116946] Fw: Computing square roots, help needed
Message-ID: <000001c1953d\$8d5e5d80\$ac8489d0@pavilion>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guy and Gals

I am sending this in this manner because i goofed up the address and this is the only way i could figure out how to get it out without rewriting the whole darned thing.

-----Original Message-----

From: Patrick Cummins <pcummins@misnet.com>
To: fpqrp-1@mpna.com <fpqrp-1@mpna.com>
Cc: qrp-1@Lehigh.EWU <qrp-1@Lehigh.EWU>
Date: Friday, January 04, 2002 10:20 AM
Subject: Computing square roots, help needed

>Hi guys and gals:

> I am sending this to both lists I monitor to see if someone out there
>can help me. A few months ago someone mentioned it would be neat to have
an
>auto tune balanced antenna matcher. I put this idea down on my "this could
>be interesting list" and it has finally surfaced onto my "see if this is
>possible list". My intentions are to use a microPIC controller (16F84?) to
>tune either a Zack Lau balanced tuner as shown in QRP Classics or Charles
>Lofgren's Z matcher as shown in the ARRL antenna compendium (vols 3 and 5).
>My problem is that I may need to compute square roots of some values and I
>don't remember how to. (So much for my early math education, but I have
been
>using either a slide rule or a calculator since about the mid 50's.)
> I could implement newtons method to solve it but would also like to
look
>at how we used to compute it. (Which may really have been an implimentation
>of newtons method.) Anyway, if any one can remember how could you please
let
>me know the method. I should note that the micro pic stuff I have, the
>simulator, emulator, and assembler do not have the square root function and
>purchasing a C compiler or other software that does is not an option for me
>at this time.
>
>And now a word from the immortal bard -- "Song of the open road with
>appologies to Joyce Kilmer"
>
>I never think that I shall see
>a billboard lovely as a tree,
>Indeed unless the billboards fall
>I'll never see a tree at all.
>

> -- Ogden Nash --
>
>(I also like his " Candy is dandy, but liquor is quicker ")
>
>72 and oo
>
>Patrick S. Cummins, W5PSC
>pcummins@misnet.com
>

Date: Fri, 04 Jan 2002 10:26:22 -0600
From: Dave Redfearn <n4elm@attbi.com>
To: k7on@earthlink.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [116947] Re: Small Solar Panel?
Message-ID: <3C35D7AE.1946D48E@attbi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Brian Short wrote:

>
> If I may add to the question...
>
> I have an "extra" small solar panel here, but I need
> a simple charge controller to use with it. I intend to
> connect the panel to a 12v garden tractor battery.
>
> I did a Google search, but did not find a simple schematic.
>
> Suggestions?
>

I use 14 volt zener diodes across the battery as a simple shunt regulator for charging a 5 ah Gell Cell from a 21 V, 300 ma solar panel. If the battery is close to being fully charged and the solar panel voltage rises above 14 volts, the zener conducts, holding the voltage across the battery terminals at about 14 volts. The zener has to disipate the full current from the solar panel (300 ma).
I use two 14 volt, 1 amp zener diodes for overhead and redundancy.

73 - Dave

=====

Dave Redfearn, ARS N4ELM, McKinney, TX
Email: n4elm@NOJUNKattbi.com (to reply, remove NOJUNK)
QRL? de N4ELM/qrp

Date: Fri, 4 Jan 2002 10:36:42 -0600
From: "Ham" <KD5NWA@mbayona.com>
To: <alihernlem@hotmail.com>, <qrp-1@Lehigh.EDU>
Subject: [116948] Re: Workbench Top Recommendations?
Message-ID: <005a01c1953d\$fe89ec40\$373d010a@a000>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I once stepped on a 40 pin dip, and it went in all the way. I ended up slipping a long neddle nose plier around the chip, grab both ends and pull hard. Talk about pain.

Cecil Bayona
KD5NWA

----- Original Message -----

From: "Brad Hernlem" <alihernlem@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Friday, January 04, 2002 4:23 PM
Subject: RE: Workbench Top Recommendations?

> >Here's a safety tip for ya--when working with DIP chips--don't go walking
> >around the work area barefoot!! Voice of experience! Ever had 14 little
> >vampire bites spaced in two 0.1 inch lines on the sole of your foot?
>
> >72--Nick, WA5BDU
>
> Yeah, and watch out for anything else that you happen to clip off and let
> fall into the carpet jungle. I drove a clipped off Molex pin into my palm
> once as I braced myself to sit down on the floor (I was most likely
barefoot
> too but that is beside the point). It was a lot longer (and sturdier!)
than
> a DIP pin and went in nearly all the way.
>

> Brad KG6IOE
>
>
> -----
> Send and receive Hotmail on your mobile device: <http://mobile.msn.com>
>

Date: Fri, 04 Jan 2002 17:40:16 +0100
From: "Ingo, DK3RED" <dk3red@t-online.de>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [116949] Re: Collins Mechanical Filters
Message-ID: <3C35DAF0.17036829@t-online.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello Brad,

> ... One search engine hit ...

Please post the URL too. ;o)
It is a start point for all others.

--
72/73 de Ingo, DK3RED (Don't forget: the fun is the power !)
dk3red@t-online.de - www.qsl.net/dk3red - www.t-online.de/~dk3red

Date: Fri, 4 Jan 2002 09:49:20 -0700
From: "John_Evans" <jaevans@codenet.net>
To: <qrp-l@lehigh.edu>
Subject: [116950] Re: chips and dips
Message-ID: <200201040949.AA2179858738@mail.codenet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii

So, it doesn't pay to let the chips fall where they may?!!!!!!

72 - john - n0hj

----- Original Message -----
From: "Ham" <KD5NWA@mbayona.com>
Reply-To: KD5NWA@mbayona.com
Date: Fri, 4 Jan 2002 10:36:42 -0600

>I once stepped on a 40 pin dip, and it went in all the way.

Date: Fri, 04 Jan 2002 10:46:09 -0600
From: "George, W5YR" <w5yr@att.net>
To: k5di@zianet.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116951] Re: VE3FAL eludes me
Message-ID: <3C35DC51.135894AB@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Propagation was curious last evening, Karl. I worked Larry first at 0235 with a signal level of about S7 but during the chase he would sink to nearly S0 at times.

Then I started looking for Fred, expecting an even weaker signal. When I heard him around 7032, he was so loud that I almost tuned past him, thinking that he "couldn't" be the Fox and be that loud. He was calling QRZ looking for Hounds to call him.

He was an honest S9 on the PRO meter here and came back on the first call. That was at 0238.

Such is 40 meters at night!

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe SOC 262 COG 8
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All incoming and outgoing email virus-checked by Norton Anti-Virus 2002

"Karl F. Larsen" wrote:

>
> I must have tuned over Fred 30 times. I just could not copy him in
> New Mexico. Things must have been slow because I never heard a pack on, or
> near Fred's frequency.
>
> Since I finished with Larry at 0202 UTC I spent 2 hours looking
> for Fred....

Date: Fri, 4 Jan 2002 09:49:34 -0700
From: "Rod N0RC" <rod@n0rc.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>,
 <ncarc@qth.net>, "cqc-1" <CQCLIST@yahoogroups.com>
Subject: [116952] WARC band exile over
Message-ID: <000b01c1953f\$caa39140\$6401a8c0@greyrock>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, 2001 is over and so is my self imposed exile to the WARC bands.
I didn't operate as much as hoped for last year but when I did, I only
used the WARC bands (contests/sprints excepted). I did make a few
could contacts, but for the most part the WARC bands are a waste land
sorry to say.

73, Rod N0RC
Ft Collins, CO

Date: Fri, 04 Jan 2002 11:56:56 -0500
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [116953] Re: Fw: Computing square roots, help needed
Message-ID: <5.1.0.14.1.20020104114333.00a73a70@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:32 AM 1/4/2002 -0600, you wrote:

> >My problem is that I may need to compute square roots of some values and I
> >don't remember how to. (So much for my early math education, but I have
> >been
> >using either a slide rule or a calculator since about the mid 50's.)
> > I could implement newtons method to solve it but would also like to
> >look
> >at how we used to compute it. (Which may really have been an implimentation
> >of newtons method.) Anyway, if any one can remember how could you please
> >let
> >me know the method. I should note that the micro pic stuff I have, the
> >simulator, emulator, and assembler do not have the square root function and
> >purchasing a C compiler or other software that does is not an option for me
> >at this time.

Patrick,

That's easy - just take the log of the number, divide by 2 (a simple shift right if it's an integer), and raise ten to that result. You could use the natural log, but then you'd have to raise e to the result. Since e doesn't respond well to being an integer, I don't recommend it.

(For the non-programmers among us, this is a joke. Ha ha.)

Here's an integer square root routine from snippets.org. You may have to play "human C compiler" with it, but it's a pretty short function.

If all else fails, try searching the web for "pic math library" - there should be some freely available ones somewhere.

Dave

```
-----
struct int_sqrt {
    unsigned sqrt,
        frac;
};

#define BITSPERLONG 32
#define TOP2BITS(x) ((x & (3L << (BITSPERLONG-2))) >> (BITSPERLONG-2))

/* usqrt:
    ENTRY x: unsigned long
    EXIT  returns floor(sqrt(x) * pow(2, BITSPERLONG/2))
```

Since the square root never uses more than half the bits of the input, we use the other half of the bits to contain extra bits of precision after the binary point.

EXAMPLE

```
suppose BITSPERLONG = 32
then    usqrt(144) = 786432 = 12 * 65536
        usqrt(32) = 370727 = 5.66 * 65536
```

NOTES

- (1) change BITSPERLONG to BITSPERLONG/2 if you do not want the answer scaled. Indeed, if you want n bits of precision after the binary point, use BITSPERLONG/2+n. The code assumes that BITSPERLONG is even.
- (2) This is really better off being written in assembly. The line marked below is really a "arithmetic shift left" on the double-long value with r in the upper half and x in the lower half. This operation is typically expressible in only one or two assembly instructions.
- (3) Unrolling this loop is probably not a bad idea.

ALGORITHM

The calculations are the base-two analogue of the square root algorithm we all learned in grammar school. Since we're in base 2, there is only one nontrivial trial multiplier.

Notice that absolutely no multiplications or divisions are performed. This means it'll be fast on a wide range of processors.

*/

```
void usqrt(unsigned long x, struct int_sqrt *q)
{
    unsigned long a = 0L;          /* accumulator      */
    unsigned long r = 0L;          /* remainder        */
    unsigned long e = 0L;          /* trial product    */

    int i;

    for (i = 0; i < BITSPERLONG; i++) /* NOTE 1 */
    {
        r = (r << 2) + TOP2BITS(x); x <=< 2; /* NOTE 2 */
        a <=< 1;
        e = (a << 1) + 1;
        if (r >= e)
        {
            r -= e;
            a++;
        }
    }
    memcpy(q, &a, sizeof(long));
}

#ifdef TEST

#include <stdio.h>
#include <stdlib.h>

main(void)
{
    int i;
    unsigned long l = 0x3fed0169L;
    struct int_sqrt q;

    for (i = 0; i < 101; ++i)
    {
        usqrt(i, &q);
        printf("sqrt(%3d) = %2d, remainder = %2d\n",
            i, q.sqrt, q.frac);
    }
}
```

```

    }
    usqrt(1, &q);
    printf("\nsqrt(%1X) = %X, remainder = %X\n", 1, q.sqrt, q.frac);
    return 0;
}

#endif /* TEST */
-----

```

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Fri, 4 Jan 2002 12:02:23 -0500 (EST)
 From: Stephan Greene <sgreene@patriot.net>
 To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
 Subject: [116954] Re: First Kit Suggestions?
 Message-ID: <Pine.LNX.4.10.10201041155380.1945-100000@tzion.greene.lan>
 MIME-Version: 1.0
 Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 4 Jan 2002, Mike Yetzko wrote:

> You know, you don't HAVE to start with a radio kit. Especially if
 > you're that much of a neophyte. Consider things like meter kits, or
 > 'toy' kits, that are simple but let you hone the same skills you'll
 > use later building a radio.

Good point. I'm not much of a kit builder, but I've been successful with every accessory kit I've made. One's I've built:

- a keyer. The Idiom Press kit for the Super CMOS (III?) is a useful accessory for CW operation, although I recall the documentation for the Super CMOS II I built was a bit sparse.

- The OHR Wattmeter. Scaled for QRP levels.

- The Emtech ZM-2 antenna tuner. Winding the two torroids wasn't hard, and I (a) HATE winding torroids and (b) am not that good at it. Worked first time. Drilling all the holes in the faceplate is a bother - find a friend with a drill press first.

I also built an OHR SCAF audio filter (I don't think this kit is available) that has been quite useful and was very easy to build.

My K-1 was bought already built, so I expect that my first "radio" kit is either going to be the 4-band module or one of the simpler CW monoband rigs.

As Mike pointed out, there are a wealth of simple kits out there - look around, and see what other folks here recommend.

73 Steve KA1LM

Stephan A. Greene	sgreene@patriot.net	ka1lm@amsat.org
Herndon, VA	1-703-654-6032 office	1-571-233-1194 cell

Date: Fri, 04 Jan 2002 17:10:36
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: dk3red@t-online.de
Cc: qrp-1@lehigh.edu
Subject: [116955] Re: Collins Mechanical Filters
Message-ID: <F50XsCj1d4vJFRFWMoz00009017@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

From: Ingo, DK3RED (dk3red@t-online.de)

>Hello Brad,

>>... One search engine hit ...

>Please post the URL too. ;o)

>It is a start point for all others.

>--

>72/73 de Ingo, DK3RED

OK, that would be:

<http://www.qs1.net/k5bcq/HK/HK.html>

But for those just generally interested in such things,
the following site is very good:

<http://www.wa3key.com/filters.html>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>.

Date: Fri, 04 Jan 2002 12:20:07 -0500
From: Ed Lawson <k1vp@grizzly.com>
To: rod@n0rc.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116956] Re: WARC band exile over
Message-ID: <3C35E447.3060409@grizzly.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Rod N0RC wrote:

>I did make a few
>could contacts, but for the most part the WARC bands are a waste land
>sorry to say.

>
I suppose each has their individual experiences and there is room for many variables, but this has not been my experience. The 30 and 18M WARC bands seem very active at my shack. There are times when 12M is hopping too. Don't mean to say much known QRP activity. I just work quite a few using QRP, and the band has quite a few signals on it. 30M has been a favorite CW band for several years.

Ed Lawson
K1VP

Date: Fri, 4 Jan 2002 12:22:49 -0800
From: "Glen Leinweber" <leinwebe@mcmaster.ca>
To: <nkennedy@tcainternet.com>
Cc: "qrp-1" <qrp-1@lehigh.edu>
Subject: [116957] Re: SWR, Theroy vs. Real World Conditions
Message-ID: <001c01c1955d\$94d26c80\$07ea7182@mcmaster.ca>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Filter networks (including those between power transistor and

antenna) are composed entirely of reactive elements: L's and C's. Designers try to keep losses (R's) in these networks as small as possible, mostly to avoid wasting power.

A lossless filter manages to transport power from its input side to its output side, much the same way that coax transports power from rig to antenna. And like coax, it'll refuse to accept power that it can't deliver to a load.

Let's take the example where you forget to connect anything to the transmitter's output. An open circuit can't accept power, and neither can the filter's input.

You've got a power transistor trying to stuff some power into the filter's input side. The filter refuses. How? It appears reactive. The power transistor presents some voltage - the filter says "no, I want some current". A bit later, the power transistor says, "OK, here's some current". The filter says "no, now I'm only accepting voltage". The poor power transistor feels like a fellow trying to get into a pair of pants after Thanksgiving dinner. The power transistor has to dissipate any power its trying to get the filter to accept.

Now when things are working properly (ie: the filter's output is terminated into a 50 ohm load), the filter accepts power gracefully, with no reactance. This'll be true within the filter's passband. In the filter's stopband (at higher frequencies) the filter appears reactive, refusing to accept power. This is how a filter manages to put out a nice clean sinewave at the fundamental frequency, even when the transistor is presenting power at fundamental plus 2nd harmonic, 3rd harmonic, 4th, 5th etc. Those harmonics see a reactive filter, while the fundamental sees a resistive filter.

It is possible to get the collector efficiency up very close to 100% in a final amp. In such a case, all the DC power that goes into the collector circuit gets transformed into RF power (at the fundamental frequency) at a 50 ohm load. Any power (for all the harmonics) that the filter refuses to accept, gets temporarily stored in a reactive element - possibly the collector choke, and a bit later re-presented to the filter.

In such a scenario, it is not useful to ask "what is the impedance at the transistor's collector?". From moment to moment, the impedance changes.

Besides, the transistor looks mostly like a switch (SPST) turning on and off multi-million times a second. Again, asking what impedance that switch looks like is sorta pointless.

But on longer time scales, you can get more specific.

All the DC power coming into the power amp collector is going somewhere - most is going out to the feedline, some is going to heat the power transistor, and a bit goes into heating the filter.

Designers often avoid the collector area, choosing to use the $V_{cc}^2/2(P_o)$ formula to find what resistance is required for the filter to see at its input. An approximation with restrictions. The approximation is that there's a nice clean sinewave voltage at the collector, whose peak amplitude equals the supply voltage. And the filter looks entirely real, with no reactance. It ain't so, but it mostly works out OK. You're avoiding what's really going on at the collector if you assume that this impedance is what's driving the filter. And when you think that this impedance is causing any power losses (as a driving impedance would), then you're falling into an assumption trap. A high efficiency (Class-E?) amp wouldn't be possible, but it is! Remember, this "driving impedance" is fictional.

Now, my problem is finding what happens to a nice efficient amp when 50 ohms isn't present at the antenna. All the tricks pulled to keep the power transistor from having to dissipate watts may get stymied. An open-circuit at the antenna could spell terrible disaster.

----- Original Message -----

From: "Nick Kennedy" <nkennedy@tcainternet.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Thursday, January 03, 2002 5:44 PM

Subject: RE: SWR, Theroy vs. Real World Conditions

> I mentioned the mythical 100 watt transmitter the other day. But now I see
> that a 50 watt is more satisfying in terms of whole numbers and also for
> QRP. This is a 50 watt transmitter that "wants" a 50 ohm load. OK, so it
> could be:
>
> #1: 50 volts with zero ohms internal impedance. [Efficiency: 100%]
> #2: 75 volts with 25 ohms internal impedance. [Efficiency: 66%]
> #3: 100 volts with 50 ohms internal impedance. [Efficiency: 50%] [Matched
> case]
> #4: 150 volts with 100 ohms internal impedance [Efficiency: 33%]
>
> (Each of the above cases produces 1 amp in the load. Add the internal
> impedance to the 50 ohm load and divide into the voltage.)
>
> And so on. The point being, I gave it the 50 ohm load it "wanted"; it gave

> me the 50 watts out it promised--in every case. I'd like one like case
#1,
> but the designer hasn't figured out how to build one like that. [Hey Glen
> L., how's that class E stuff coming?]

Glen VE3DNL leinwebe@mcmaster.ca

Date: Fri, 04 Jan 2002 09:40:50 -0800
From: Russ Carpenter <russ@natworld.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [116958] Don't Miss the Spartan Sprint on Monday!
Message-ID: <B85B2921.B50E%russ@natworld.com>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

The January Spartan Sprint will be held on January 7, 2002 (which is our standard date--the first Monday of the month). You may operate on any one or more of five bands--80, 40, 20, 15, and 10 meters. Don't worry if your station is a bit obese. We commend the winners in two categories--points (the Tubby Division), and points per pound (the Skinny Division).

For this month only, we will give double points for each contact on 80 meters.

If you are a newcomer to the Sprints, take a look at the introductory material at the end of this post.

1. Start at 9:00 PM EST, 8:00 CST, 7:00 MST and 6:00 PST. Finish at 11:00 PM EST, 10:00 CST, 9:00 MST and 8:00 PST. In terms of UTC, start at 0200 and finish at 0400, Tuesday.

2. The frequencies will be 3560+- kHz, 7040 kHz+-, 14060 kHz+-, 21060 kHz+-, and 28060 kHz+-. (You may operate any number of bands--your choice.)

3. Exchange RST, SPC (state, province or country) and power output.

4. If you choose to call CQ, use the format "CQ SP," or "CQ QRP TEST."

5. You can take credit for working the same station on a second, third, or fourth band.

After the contest, we invite you to use our autolog, which is part of the ARS Sojourner. Just go to www.natworld.com/ars and follow the link for

"Direct access to autologs". Or you can speed things up by going directly to the Spartan Sprint autolog page at www.natworld.com/ars/ss_log.html.

"Station Weight" is defined as the combined weight of all transmitters, receivers, keys, keyers and batteries used during the Sprint. We use decimal pounds, rather than pounds and ounces. You may report your weight to the nearest 10th of a pound, or, at your option, the nearest 100th of a pound. For stations weighing less than one pound, we recommend the nearest 100th of a pound.

If you don't have access to the web, send Russ Carpenter, AA7QU, an e-mail with your total QSOs and the total weight of your station. You may also include your comments from the soapbox. Russ' email address is russ@natworld.com.

We publish results for each Spartan Sprint on the Thursday following the Sprint. This may be the world's quickest contest reporting! Please send us your log as soon as possible, but in no event later than Wednesday afternoon.

The Spartan Sprint is based on a simple but stimulating concept. We are encouraging all of you to cobble together the kind of station you'd use in a portable environment--lightweight transceiver, keyer, key, and battery. Then put that turkey on the air, and participate in a two hour sprint.

All operators are invited to play, whether or not they are members of Adventure Radio Society. Even if you don't have lightweight equipment, your participation will be rewarding, both for you and the other participants. We'll report the score in two different formats--absolute scores, and points per pound of station weight. So you can get your kicks from running up a magnificent score, or achieving an remarkable ratio of points per pound.

If you're thinking about becoming a member of Adventure Radio Society, just send Richard Fisher (our membership chairman) an e-mail expressing your interest. Richard's e-mail address is KI6SN@aol.com. Membership is free, and the organization has a great group of men and women who combine their love of ham radio with their affection for the outdoors. You don't need to be a macho person; ARS welcomes people of all ages and levels of ability.

Russ Carpenter, AA7QU, Contest Manager

russ@natworld.com

Date: Fri, 04 Jan 2002 09:44:23 -0800
From: Russ Carpenter <russ@natworld.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [116959] Give 80 Meters a Try in Monday's Spartan Sprint
Message-ID: <B85B29F7.B50F%russ@natworld.com>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

This is the time of year when 80 meters is the Magic Band. To stir up more interest in the low end, we will give double points for 80 meter contacts in Monday's Spartan Sprint. Don't miss it!

Russ Carpenter, AA7QU
Contest Manager for the Adventure Radio Society

Date: Fri, 4 Jan 2002 12:48:37 -0500 (EST)
From: George Gingell <k3tks@u1.abs.net>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [116960] Re: Workbench
Message-ID: <20020104115212.J83463-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have made several workbenches over time, but the One in my office is likely the very best ever. There is one problem, However, It is rather like the famous Boat in the Basement project. Well, not quite, I can disassemble it, but even that would be a chore. Besides, I would have to re-do the finish and trim on it.

What is it? It started out as a 36" Solid Core Birch Door. It had a few scars on one side which was why I got it so cheap. I made up ends out of two by fours laminated with 1/2" plywood. The door has Nuts embedded in the Top and bottom edges (epoxyed in place), three 1/2" Bolts secure the Side Panels to the Top (Door). There is a Base Section of 2x4's and 1/2" plywood. there is an 18" deep shelf between the base and the Workbench top with sliding Wood Paneling doors on the front. There is a 12" shelf across the back for Books and Test Equipment. A full sheet of 1/2" plywood on the back.

This work bench is so heavy and strong, you could work on your automobile engine on top of it.

I had to use my sons 25 Ton Jack to lift it and place iron pipes under it to move it around in the room when I rearranged the office.

Maybe one day I will make an addition to the house and move it thru the exterior wall iinto the new shop on the back of the house. :^}

We actually have two other benches in another part of the basement.

Both are simple and Temporary. Two Heavy Duty Saw Horses with Solid Core FIRE RATED Doors on top for the bench. My Son uses one for Automotive Engine Building. I use the other for my Locksmith bench.

We have a Drill Press, Grinder and Large Vise mounted on them.

Rather than put holes in the Doors, We made a wooden base out of two by fours and plywood bolted the units to the base and then use those Hand operated Quick Clamps to secure the base to the top.

That makes it handy to move the equipment if more room is needed.

Mike uses a piece of Heavy Duty Cardboard on top of his bench to protect the door surface. I think it is from shipping cartons for Copy Machines, since that is his trade. I use a piece of heavy rubber mat on part of mine. It is great stuff, about 1/4" thick. It came in 18"X24" sheets from Tandy Leather Company. I once did a lot of LeatherCraft work.

I have seen similar pads on expensive commercial Test Benches.

I have also used Standard Kitchen Counter Tops with File Cabinet Bases in the past. More Expensive plan, but it has a higher XYL Approval Rating. :^}

Another Good Solution is to install pieces of 1 x 4 around the walls of a Closet and then cut a piece of 3/4" plywood to fit. The ply wood just lays on top of the rails. It does not need to be secured as It can not go anywhere. This is good if you don't want a permanent installation.

Just use Screw nails to secure the 1x4 's to the wall studs.

It makes a great computer workstation area in the office closet.

This is also particulary nice feature if you have little ones around that like to "Help Dad with his project" :^} Just leave it lay there and lock the door.

OBTW, I also find that a white cotton Towel is handy on the workbench to keep small parts from rolling off on the floor. A bit of wood trim is also handy on a workbench edge for the same reason.

Aluminum Stock (2"X 6-8') works well and doubles as a Ground Buss.

What ever bench you make, dont forget GOOD Electrical Outlet Strips with Surge Protection and Ground Strap Connections. Also a Power Disconnect!

Have fun. Make something, it is easy.

Harbor Freight has Good Folding Metal Sawhorses for sale at \$19.95 a pair.

I see Used Fire doors in the paper all of the time.

I once had an offer of 300 of them brand new for free. The XYL Said No Way! :^} I had a Design drawn up for a 12 X 20 foot Workshop Fortress.

It was going to be the Maryland Milliwatt Clubhouse. :^}

Maybe another time...

Sir George, The First :^}

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
Former QRP A.R.C.I. Net Manager and Board of Director Member.
Gingell & Company, Ltd. Small Business Telephone Systems
Commercial Locksmith Services (301) 572-6789 Office & Fax
George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117
Maryland Milliwatt Club QRP Reference Library, (301) 572-6789 IQRR #1
Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Collector of Quartz Crystals and Telegraph Keys.

"72" = "Wishing You Good QRP" (C) 1991 Oleg Borodin, RV3GM

Date: Fri, 4 Jan 2002 10:46:28 -0800
From: Bob Nielsen <nielsen@oz.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116961] Re: WARC band exile over
Message-ID: <20020104184627.GA20473@oz.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

On Fri, Jan 04, 2002 at 09:49:34AM -0700, Rod N0RC wrote:

> Well, 2001 is over and so is my self imposed exile to the WARC bands.
> I didn't operate as much as hoped for last year but when I did, I only
> used the WARC bands (contests/sprints excepted). I did make a few
> could contacts, but for the most part the WARC bands are a waste land
> sorry to say.

I did quite a bit of QRP operating on all bands between 80 and 10 last year and found the WARC bands to be pretty useful, although there was not as much activity as on 10 and 20 meters. On 12 meters alone, I worked some pretty fair QRP DX, including 9M6, CE0, CT3, HB0, OM and ZK2.

Bob

--

Bob Nielsen, N7XY
Bainbridge Island, WA
IOTA NA-065, USI WA-028S

nielsen@oz.net
<http://www.oz.net/~nielsen>

Date: Fri, 04 Jan 2002 13:47:31 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: solitsky@acsu.buffalo.edu
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [116962] Re: Visual Acuity> bifocals
Message-ID: <3C35F8C3.7C572783@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I'd just like to chime in here with some advice too. Visual acuity problems can be caused by many things. Be sure you have your eyes examined by an opthamologist, not just an optometrist. You might have underlying causes that the optometrist might not see! Diabetics, pay particular attention!

73

Date: Fri, 04 Jan 2002 12:57:11 -0600
From: "George, W5YR" <w5yr@att.net>
To: leinwebe@mcmail.cis.mcmaster.ca
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [116963] Re: SWR, Theroy vs. Real World Conditions

Message-ID: <3C35FB06.6D5A3B50@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Good posting, Glen.

My only comments are on your closing remark:

> Now, my problem is finding what happens to a nice
> efficient amp when 50 ohms isn't present at the antenna.
> All the tricks pulled to keep the power transistor
> from having to dissipate watts may get stymied. An open-
> circuit at the antenna could spell terrible disaster.

Keeping that power transistor from having to eat all that d-c input power is the job of the **external** matching devices between the transmitter output connector (where that 50 ohm resistance load is expected) and the connection to the antenna. These devices can include any or all of an external "tuner;" the properties of the transmission line (stubs, matching sections of different Z_0 , etc); and any impedance matching devices that are used at the junction of the feedline and the antenna (delta, gamma, T-matches and the like).

I guess I don't see what the problem here is just because the antenna itself doesn't look like a 50 ohm resistor to a 50-ohm transmission system. We **make** the antenna look that way to the transmitter antenna connector, and that is what counts to the amp devices inside the box, not what the antenna look like. What am I missing here?

An open circuit at the antenna is unlikely to spell disaster for a couple of reasons.

First, if the feedline, et al has enough loss, even an open circuit at the antenna end will still present **some** finite load resistance to the transmitter, not a zero or infinite resistance load.

Second, designers who wish to remain employed for more than one development project manage to include protective measures in the transmitter to guard against improper loads.

These measures include the choice of solid-state devices that can happily operate into open-circuit and short-circuit loads without self-destructing; load resistance detection circuitry which reduces power input and output when an improper load is present (these are commonly called SWR protection circuits although what they measure has little to do with any SWR anywhere in the system); and provision of internal "antenna tuners" which can take a small mismatch (usually from about 16.7 ohms to 150 ohms resistive with

modest reactance) and present the internal matching network with its desired 50 ohm resistive load.

Very good summary of amplifier and matching network operation, Glen. Enjoyed reading it. Since my remarks are so long, please pardon me for not quoting all of your posting in the interests of conserving bandwidth.

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe SOC 262 COG 8
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All incoming and outgoing email virus-checked by Norton Anti-Virus 2002

Glen Leinweber wrote:

>
> Filter networks (including those between power transistor and
> antenna) are composed entirely of reactive elements: L's
> and C's. Designers try to keep losses (R's) in these networks
> as small as possible, mostly to avoid wasting power.
> A lossless filter manages to transport power from its
> input side to its output side, much the same way that coax
> transports power from rig to antenna. And like coax, it'll
> refuse to accept power that it can't deliver to a load.

<snip>

Date: Fri, 4 Jan 2002 11:26:58 -0800
From: "Trevor Jacobs" <fxtech@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [116964] Re: VE3FAL alludes me
Message-ID: <003901c19555\$c7892fe0\$569eb2d1@tjacobs>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I also had a hard time with Fred, but did hear him call CQ FOX and his call a few times around 7.032.50 I think. Was way down though, so I'm sure that I was weak there. Only heard a couple of hounds also. This was in the last half hour of the hunt. Thanks to both FOXII for a fun evening.

72/73's

Trev
KG6CYN

----- Original Message -----

From: Karl F. Larsen <k5di@zianet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: Friday, January 04, 2002 5:51 AM
Subject: VE3FAL alludes me

>
> I must have tuned over Fred 30 times. I just could not copy him in
> New Mexico. Things must have been slow because I never heard a pack
on, or
> near Fred's frequency.
>
> Since I finished with Larry at 0202 UTC I spent 2 hours looking
> for Fred....
>
> --
> Yours Truly,
>
> - Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
> <http://www.zianet.com/k5di/>
>
>

Date: Fri, 04 Jan 2002 14:26:25 -0500
From: Pete Burbank <plburbank@kih.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [116965] Fox: VE3FAL eludes me
Message-ID: <5.0.2.1.0.20020104141821.00ae5250@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:46 AM 1/4/2002 -0600, George, W5YR wrote:

>SNIP.
>Then I started looking for Fred, expecting an even weaker signal. When I
>heard him around 7032, he was so loud that I almost tuned past him,
>thinking that he "couldn't" be the Fox and be that loud. He was calling QRZ
>looking for Hounds to call him.
>
>He was an honest S9 on the PRO meter here and came back on the first call.
>That was at 0238.
>
>Such is 40 meters at night!

The same thing happened to me George. Fred was really strong here in KY.
Without thinking, I gave him a 559 but it should have been much more
73 Pete NV4V

Date: Fri, 04 Jan 2002 19:37:44 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: pcummins@misnet.com, qrp-1@Lehigh.EDU
Subject: [116966] Re: Fw: Computing square roots, help needed
Message-ID: <F1846inmuoQLeGpCiNl00016dda@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: "Patrick Cummins" <pcummins@misnet.com>
>Reply-To: pcummins@misnet.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Fw: Computing square roots, help needed
>Date: Fri, 4 Jan 2002 10:32:54 -0600
>>From: Patrick Cummins <pcummins@misnet.com>
>To: fpqrp-1@mpna.com <fpqrp-1@mpna.com>
>Cc: qrp-1@Lehigh.EDU <qrp-1@Lehigh.EDU>
>Date: Friday, January 04, 2002 10:20 AM
>Subject: Computing square roots, help needed
>
>
> >Hi guys and gals:
> > I am sending this to both lists I monitor to see if someone out there
> >can help me. A few months ago someone mentioned it would be neat to have
> >an
> >auto tune balanced antenna matcher. I put this idea down on my "this
> >could
> >be interesting list" and it has finally surfaced onto my "see if this is
> >possible list". My intentions are to use a microPIC controller (16F84?)
> >to
> >tune either a Zack Lau balanced tuner as shown in QRP Classics or Charles
> >Lofgren's Z matcher as shown in the ARRL antenna compendium (vols 3 and
> >5).
> >My problem is that I may need to compute square roots of some values and
> >I
> >don't remember how to. (So much for my early math education, but I have
> >been
> >using either a slide rule or a calculator since about the mid 50's.)
> > I could implement newtons method to solve it but would also like to

>look
> >at how we used to compute it.

I don't think the old manual method works very well with computers, which is why no-one uses it.

Newton's method works very well. I implemented it on a fixed-point ADI 16-bit DSP and it converged every time in three iterations. I did use a little trick I came up with to make the algorithm faster, sacrificing accuracy for speed.

Since you presumably only need eight bits, you could also use a lookup table, if you have enough storage.

You could try posting to comp.arch.arithmetic, that's where you'll find all the specialists for this sort of thing.

Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com
My web page: http://www.geocities.com/leon_heller
My low-cost Altera Flex design kit: <http://www.leonheller.com>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>.

Date: Fri, 04 Jan 2002 16:53:14 +0000
From: Stewart Bryant <stewart.bryant@virgin.net>
To: pcummins@misnet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [116967] Re: Fw: Computing square roots, help needed
Message-ID: <3C35DDFA.DC833D05@virgin.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

There is squareroot routine in the PIC library

<http://www.microchip.com/1000/suppdoc/appnote/category/library/index.htm>

If the reason that you need sqrt is to to a vector sum, you can also use the approximation (larger + half smaller).

Stewart G3YSX

Patrick Cummins wrote:

```
> Guy and Gals
> I am sending this in this manner because i goofed up the address and
> this is the only way i could figure out how to get it out without rewriting
> the whole darned thing.
>
> -----Original Message-----
> From: Patrick Cummins <pcummins@misnet.com>
> To: fpqrp-1@mpna.com <fpqrp-1@mpna.com>
> Cc: qrp-1@Lehigh.EWU <qrp-1@Lehigh.EWU>
> Date: Friday, January 04, 2002 10:20 AM
> Subject: Computing square roots, help needed
>
> >Hi guys and gals:
> > I am sending this to both lists I monitor to see if someone out there
> >can help me. A few months ago someone mentioned it would be neat to have
> >an
> >auto tune balanced antenna matcher. I put this idea down on my "this could
> >be interesting list" and it has finally surfaced onto my "see if this is
> >possible list". My intentions are to use a microPIC controller (16F84?) to
> >tune either a Zack Lau balanced tuner as shown in QRP Classics or Charles
> >Lofgren's Z matcher as shown in the ARRL antenna compendium (vols 3 and 5).
> >My problem is that I may need to compute square roots of some values and I
> >don't remember how to. (So much for my early math education, but I have
> >been
> >using either a slide rule or a calculator since about the mid 50's.)
> > I could implement newtons method to solve it but would also like to
> >look
> >at how we used to compute it. (Which may really have been an implimentation
> >of newtons method.) Anyway, if any one can remember how could you please
> >let
> >me know the method. I should note that the micro pic stuff I have, the
> >simulator, emulator, and assembler do not have the square root function and
> >purchasing a C compiler or other software that does is not an option for me
> >at this time.
> >
> >And now a word from the immortal bard -- "Song of the open road with
> >appologies to Joyce Kilmer"
> >
> >I never think that I shall see
> >a billboard lovely as a tree,
> >Indeed unless the billboards fall
> >I'll never see a tree at all.
> >
> > -- Ogden Nash --
```

> >
> >(I also like his " Candy is dandy, but liquor is quicker ")
> >
> >72 and oo
> >
> >Patrick S. Cummins, W5PSC
> >pcummins@misnet.com
> >

Date: Fri, 04 Jan 2002 19:56:58 +0000
From: Arthur Moe <kb7ww@uswest.net>
To: qrp <qrp-1@Lehigh.EDU>
Subject: [116968] 6 METER DX
Message-ID: <3C36090A.7F6A5F40@uswest.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Worked EH8PBX this morning with 3 watts. 5600 miles. He was S9 here.

Contact was SSB.

Art
KB7WW

Date: Fri, 04 Jan 2002 15:08:17 -0500
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-1@lehigh.edu
Subject: [116969] UPDATE: SMT Practice Kit
Message-ID: <3.0.6.32.20020104150817.007afd90@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

HI Gang,

I ordered the boards for this project today. Getting 100 solder masked and componet screened boards, so will look nice and be easier to build than if we used say, a FAR board. I'll have them in about 2 weeks. I'll order the rest of the parts Monday. We should be able to get these out to you by the end of the month.

We have about 70 kits reserved so far, so still time to get in on it!

For those of you who haven't been paying attention, we're kitting up the W720I 555 timer based keyer (as seen on pg 178 of SSD) in SMT form, as a simple but functional introduction to building with SMT parts. About 25 or so parts fit on a 1.8" x 1.7" board. We got some IC's, transistors, diodes, caps, resistors and some cute little trim pots, so a good cross selection of parts to work with.

Those of you who have already reserved a kit can start sending your \$15.00 per kit (sorry can't do paypal) to me at :

Steven Weber
633 Champlain St
Berlin, NH 03570

Thanks!

72,
Steve, KD1JV
"Melt Solder"
White Mountians of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Fri, 4 Jan 2002 15:12:06 -0500
From: "Ernest Rodriguez" <hitruz@hotmail.com>
To: <qrp-l@Lehigh.EDU>
Subject: [116970] One eye frequency counter.
Message-ID: <0E5kDkGjvuW2JwJ5Q2n00000ea9@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi,

I've bought a copy of QST magazine, couple of months ago.
It was december issue.
There was a little neat project in it, a one digit frequency counter.
They call it the unicounter. Just perfect for my new QRP rig.

I've built the project, but now, I need the code for the pic microcontroller in it.

In fact, I've built this thing to learn how to program, and it was a nice project.

At the end of the article, it says to send an e-mail to the author to have the code.

I've sent an e-mail, but no answer...

I've sent a email to QST magazine... still no answer...

Is someone on the list built this thing and have the code for it ?
I just need to burn the Pic to make it work.

72

"Duct tape is like the Force. It has a light side, a dark side, and it holds the universe together...."

Date: Fri, 4 Jan 2002 15:13:07 -0500
From: "Lau, Zack, W1VT" <zlau@arrl.org>
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [116971] DSP-10 demo in Enfield CT (very near CT/MA border) Tomorrow Jan 5

Message-ID: <125490A005E3D3118C9C00805FC743CC027E3150@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Interested in the DSP-10 software defined radio published in QST and kitted by www.tapr.org ?
It is a rather complicated kit, with over 300 surface mount parts. However, I've had no trouble installing the ICs with 50 mil spacing. The club is primarily into VHF and microwave DX.
--Zack W1VT

North East Weak Signal Group MEETING JANUARY 5TH 1PM-4PM
AT THE RADDISON HOTEL IN ENFIELD CONNECTICUT.
MATT, KB1VC WILL DO A SHOW AND TELL ON HIS NEW DSP-10 TRANSCEIVER.

January Contest:

This is the contest with a club competition, so let's all get on and help with the club aggregate score. We will discuss our secret strategy at the meeting.

Duct Tape Auction:

It's about time we had another duct tape auction, so tape two items together (one good, the other, uh, interesting) and bring them to the meeting. Someone will be unable to resist one of them!

The Raddisson puts on a decent \$8 buffet lunch (including beverage) at noon if you arrive early.

Directions to Raddisson Hotel:

I-91 S to exit 49, left off exit, take 2nd right, hotel is on left.

I-91 N to exit 49, right off exit, take 1st right, hotel is on left.

Date: Fri, 4 Jan 2002 15:32:24 -0500 (EST)
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
To: qrp-1@lehigh.edu
Subject: [116972] Kit for ugly construction, from UK
Message-ID: <200201042032.g04KW0I04512@panix1.panix.com>

Hi people,
There may be people who are workshop limited, and would find this a useful thing to have available.
I just ran across it.

<http://www.copperisland.biz>

73, doug

Date: Fri, 4 Jan 2002 15:38:06 -0500 (EST)
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
To: qrp-1@lehigh.edu
Subject: [116973] Popular Electronics pages, with some Carl and Jerry stories
Message-ID: <200201042038.g04Kc6805041@panix1.panix.com>

Hi people,

Jean de Bellefeuille has a web site of Popular Electronics at
<http://home.gwi.net/~jdeb主ll/pe/PEIntro.htm>.

In particular note the Carl and Jerry stories that I have provided at

<http://home.gwi.net/~jdebell/pe/cj/cnjindex.htm>.

And for the self serving part of this announcement, I've got some more of the magazines on the way, but I'm also looking for the ones to complete the archive, either to buy or borrow. I'm in the SF Bay Area, and get to NorCal meetings fairly regularly.

73, doug

Date: Fri, 04 Jan 2002 14:42:28 -0600
From: John Seboldt K0JD <k0jd-1@seboldt.net>
To: qrp-1@Lehigh.EDU
Subject: [116974] Re: ARRL Radio Designer
Message-ID: <5.1.0.14.0.20020104142640.00a0dc60@mail.seboldt.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 12:50 AM 1/4/02 -0800, you wrote:

>Does anyone know where I could obtain a copy of the ARRL Radio Designer
>software? They no longer sell it. Thanks.

>

>Huston K7ITA

For free, you can get some very good modeling software now:

Ansoft's Serenade SV - student version of some pretty powerful RF simulation software. It's kind of a more powerful descendant of ARRL Radio Designer, only free. Lot better with its integrated schematic editor - no netlisting!

<http://www.ansoft.com/about/academics/sersv/index.cfm>

Also take a look at OrCad 9.2 lite edition -

<http://www.orcad.com/Product/simulation/PSpice/eval.asp>

You're better off requesting the CD of OrCad 9.2 lite, although the online download of PSpice 9.1 is OK. Again, schematic editor, and lots of in-depth displays, including a scope-like display.

Check my page <http://www.seboldt.net/k0jd/pspice.html> for some on-screen displays of OrCad output.

72, John K0JD
Milwaukee

Date: Fri, 4 Jan 2002 15:45:31 -0500 (EST)
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
To: qrp-l@lehigh.edu
Subject: [116975] Tube transmitters from our early days
Message-ID: <200201042045.g04KjVk05883@panix1.panix.com>

Hi people,

Third post: I mentioned a single tube transmitter that I'd built in the 60's using a 7984. I found the article, in the August 1962 CQ magazine, and now would like to have the magazine. If anyone has an extra copy of that magazine, please get in touch with me.

Since I recalled building it on a 4"x 6" chassis, I was thinking I was doing pretty good, but the original article has it on a slightly smaller chassis and used a VR tube, when I used a Zener. I did add a manual TR switch and a knob-tuned output variable, but still....

73, doug

Date: Fri, 4 Jan 2002 15:48:06 -0500 (EST)
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
To: qrp-l@lehigh.edu
Subject: [116976] my favorite Christmas present- O'scope clock
Message-ID: <200201042048.g04Km6406122@panix1.panix.com>

Hi people,

Fourth post: Just another plug; my favorite Christmas present might interest some of you. Take a look at www.cathodecorner.com. It is so cool!!!

73, doug

Date: Fri, 04 Jan 2002 21:41:27 +0000
From: Larry Cahoon <lejek@erols.com>
To: N2CQ@dandy.net,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [116977] Re: [CONTEST] QRP Contest Calendar - Jan 2002
Message-ID: <5.1.0.14.0.20020104213847.020d6000@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

>
>~~~~~
>
>Power Management Contest (CW) ...QRP Recommended
>
>Jan 12 - 1800z to Jan 13 - 0600z
>
>Rules: <http://www.qsl.net/wd3p/qrp/pwrcontest/pwrcontest.htm>
>
>"NAQP Piggyback to see how long your battery runs down"
>
>~~~~~

I sent out a feeler on the value of continuing this last month and only got one answer back. So I had sort of forgotten about it. Since Ken has put it on his list I'll go forward with it this round and see if I get some interest as evidenced by more than one log this time. I will have to update the page for the dates at times as I have not done that. Then I'll stick a link to it off of my web page this time.

So for now it's a go.....

73 de Larry.....WD3P in MD
<http://www.qsl.net/wd3p/>

Date: Fri, 4 Jan 2002 14:02:50 -0800 (PST)
From: Bill ROWLETT <kc4atu@yahoo.com>
To: kb7ww@uswest.net,
Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116978] Re: 6 METER DX
Message-ID: <20020104220250.95832.qmail@web14207.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Hay Art,

When you give a report, a location would be nice. A 7 call does not mean you are in 7 land.

thanks, Bill KC4ATU in the great wasteland of northern Virginia

Do You Yahoo!?

Send your FREE holiday greetings online!
<http://greetings.yahoo.com>

Date: Fri, 4 Jan 2002 17:50:37 -0500
From: "Steve Lawrence" <Steve.Lawrence@ITWFEG.COM>
To: qrp-1@Lehigh.EDU
Subject: [116979] [Summary] Small Solar Panel
Message-ID: <0FD4031ECC.7866991D-0N85256B37.007B4D3B@troy.pmifeg>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Several have requested a summary about my inquiry into a small solar panel, suitable for charging 12v batteries (8 or 10 AA cells), with an output in the 100 - 200 ma range. Here's what the "list" has provided:

Radio Shack (and several others) supplies an ICP panel (1.8w @ 12v) for trickle charging a car battery. Check for:
#980-0561 at
<http://www.radioshack.com>

Similar panels have also been found at Harbor Freight:
<http://www.harborfreight.com> (search on "solar")
and at J. C Whitney:
Also, J.C Whitney has small panels at reasonable prices.

<http://www.jcwhitney.com/catsubpic.jhtml?CATID=186344&BQ=jcw2>
(look about 2/3 of the way down the page for solar chargers).

These also are available at RV type dealers.

Electronic Goldmine was also sited, but I already knew their 19v @ 100ma panel was sold out. Too bad... this is what started the quest:
<http://www.goldmine-elec.com/>

But they have a number of other interesting solar panels/cells. Check them out.

Still another potential resource:
<http://www.allelectronics.com/index.html>

And a boating oriented source:
<http://www.boatus.com>

Still another recommended source is Electronics Parts Outlet in the Houston, TX area. (No details on their web site). Since I'm in the Dayton, OH area (yes, a 20 minute drive to Hamvention...), Texas is a bit far!

Finally, some potentially interesting stuff at:

<http://www.siliconsolar.com/>

Well, I hope this helps all those looking. While the ICP panels look promising, I'm concerned about their weight and (perhaps) "over packaging". As a backpacker, weight simply cannot be overlooked! Also, there's a "QRP/Solar" list on Yahoo, but not much activity:

<http://groups.yahoo.com/group/QRPSolarPower>

If there are any other finds or recommendations, please let the "list" know...!

73,
Steve
AA8AF

Date: Fri, 04 Jan 2002 23:30:42
From: "Bruce Prior" <n7rr@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [116980] No QRP at Salt Lake 2002 Winter Olympics
Message-ID: <F143mPjzDNilPamVI5W00016fab@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

As part of the hoopla in preparation for the Winter Olympics in the Salt Lake City region in February, we received the souvenir program. In an article about security there is a list of prohibited items. It includes some obvious things like weapons, fireworks and illegal drugs. The prohibited list also includes "two-way radios." That means no K1, no DSW, no TH-D7A(G). I'm sure the organizing committee thinks it has communications covered: all that channalized stuff used by emergency service agencies and Olympics officials. What standard communications systems lack is the resiliency and flexibility of amateur radio, which will actually work in a big emergency when those standard communications channels get clogged. I inquired with the Utah SCM and the ARRL Rocky Mountain Director and I received no reply. I assume that means that there has been no amateur radio involvement in the preparation for this major international event. Radio amateurs attending the many Olympic venues will be prohibited from carrying their gear. Were radio amateurs similarly shut out in Sarajevo and Calgary and Nagano? Has amateur radio become irrelevant in community affairs?

73, Bruce Prior N7RR

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<http://www.hotmail.com>

Date: Fri, 4 Jan 2002 18:36:52 -0500 (EST)
From: baltimoremd@baltimoremd.com
To: "Scott E. Olitsky" <solitsky@acsu.buffalo.edu>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [116981] Re: Visual Acuity> bifocals
Message-ID: <20020104182633.076790-100000@unix1.vhost.min.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 4 Jan 2002, Scott E. Olitsky wrote:

> A few thoughts to those of you using near reading aids (I am not quite there
> yet - a couple more years to go).
>
> Make sure to tell you eye doctor where you like to have clear vision. In
> general, we are taught to give people clear "reading" vision at 13",

Just left my eye doc today...who told me that I could continue using the
"readers" that I buy with the "powers" ratings, but his bet was that I'd
get frustrated with one magnification for reading and one for computer
work.

So...and I know there must be a chart/formula:

Given that you know the prescribed reading Sph value(mine is equal in both
eyes) at what distance is that computed?

Next, how can I chart/extrapolate various maginification factors per
the distance?

Example

Prescribed sph 2.25	Reading Distance 16 inches?	Magnification 2.25
My Guess	Computer Monitor 24 inches	Magnification ???

The reason I need the chart/formula is that I have long arms for my
size, live in cramped quarters with non normal distance from eyes
to monitor.

If there's a formula, I can do a spread sheet and make it available
to others if requested.

Of course if I could see well, I could even try an interactive web page
that would let you plug it in online (g).

Thom

baltimoremd@baltimoremd.com
<http://www.baltimoremd.com/>
<http://www.baltimorehon.com/>
<http://www.zerobeat.net>

Thom LaCosta K3HRN Webmaster
Baltimore's Home Page
Home of the Baltimore Lexicon
Home of The QRP Web Ring
and Drake Mail List Pages

Date: Fri, 04 Jan 2002 18:31:57 -0500
From: Dan Wolfe <n4roa@mounet.com>
To: qrp-1@Lehigh.EDU, qrp-1@Lehigh.EDU
Subject: [116982] Hello
Message-ID: <3C363B6D.3508@mounet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Howdy ole Underdogs,

Wow! Ole Dave and Ron are really first class Foxii nabbers for sure. Dave at 900mw and I heard Ron at 1W with Fred. I have been turning my power up to get it over as quick as possible. I still can't sit for long spells yet. hee hee

Man, I am proud and pleased as punch to have you guys on the same team. I have been using my large loop almost all the time here. I have others but it seems to be the better one in most cases. It is about 450/480 ft. long and up about 60/65 ft average. Fed with what I call ladder line. I have been using it for several years now. The more wire up, the better, up to around 1000 ft or so. That's one of my next projects, get up around 1000 ft in the loop.

I did get both Foxii last night. I had to really hunt for Fred but that is the way I like it. hee hee

Did not hear Art or Randy last night but I know what kind of hunters they are. Super deluxe. Gooooooooo Underdogs, lets catch those flop-eared Cheeseheads.

See ya on the bands.

72/73..Underdog Dan

Date: Fri, 04 Jan 2002 18:54:11 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: n7rr@hotmail.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [116983] Re: No QRP at Salt Lake 2002 Winter Olympics
Message-ID: <3C3640A3.4719CEB1@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bruce,

For your information. There are no two way radios permitted to SPECTATORS. Communications at an Olympic even is tightly controlled. Partly in fear of a terrorist attack, and partly to ensure totally fair competition!

Amateur radio Stations have been set up and probably will be at Salt Lake in the athletes quarters for personal communications home. The fact they don't want some yahoo operating his radio there is not unusual. I doubt you would have much luck at any major sports stadium! It is not a personal attack against ham radio or QR.!

73

End of QRP-L Digest 2426

